

Malawi



Demographic and
Health Survey

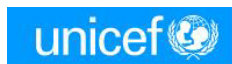
2004

Malawi Demographic and Health Survey 2004

National Statistical Office
Zomba, Malawi

ORC Macro
Calverton, Maryland, USA

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This report summarises the findings of the 2004 Malawi Demographic and Health Survey (MDHS), which was carried out by the Malawi National Statistical Office (NSO). Most of the funds for the local costs of the survey were provided by multiple donors through the National AIDS Commission. The Department for International Development (DfID) of the British Government, UNICEF, and UNFPA also provided funds for the survey. The United States Agency for International Development (USAID) provided technical assistance through ORC Macro. Technical assistance for the HIV testing was provided by the Centers for Disease Control and Prevention.

The MDHS is part of the worldwide Demographic and Health Surveys (DHS) programme funded by the United States Agency for International Development (USAID). The programme is designed to collect data on fertility, family planning, maternal and child health, nutrition, and HIV/AIDS. The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID.

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FOREWORD

This final report presents the major findings of the 2004 Malawi Demographic and Health Survey (MDHS). The 2004 MDHS survey is the third survey of its kind to be conducted in Malawi; the first MDHS was in 1992 and the second was in 2000. The 2004 MDHS included, for the first time, testing of blood samples to provide national rates for anaemia and HIV. The fieldwork was carried out by the National Statistical Office (NSO) in collaboration with the Ministry of Health from October 2004 to January 2005. In 1996, a similar survey on Knowledge, Attitudes, and Practices in Health (MKAPH) was conducted. All four surveys were designed to provide information on indicators of maternal and child health in Malawi.

The primary objective of the 2004 MDHS was to provide up-to-date information for policymakers, planners, researchers, and programme managers that would allow guidance in the development, monitoring, and evaluation of health programmes in Malawi. Specifically, the 2004 MDHS collected information on fertility levels, nuptiality, fertility preferences, knowledge and use of family planning methods, breastfeeding practices, nutritional status of mothers and children, childhood illnesses and mortality, use of maternal and child health services, malaria, maternal mortality, HIV/AIDS-related knowledge and behaviours. The survey will also provide the national level estimates of HIV prevalence for women age 15-49 and men age 15-54, and anaemia status of women age 15-49 and children age 6-59 months.

The 2004 MDHS results present evidence of a decline in maternal mortality rate as compared to the 2000 MDHS; decrease in fertility rates, an increase in the use of family planning methods and a decline in infant and under-five mortality since the 1992 MDHS. However, the disparity between knowledge and use of family planning remains high. Some of these are critical issues and need to be addressed without delay.

The NSO would like to acknowledge the efforts of a number of organisations and individuals who contributed immensely to the success of the survey. First, we would like to acknowledge the financial assistance from the National AIDS Commission (NAC), United States Agency for International Development (USAID), the Department for International Development (DFID), United Kingdom, and the United Nations Children's Fund (UNICEF/Malawi), the Centers for Disease Control and Prevention (CDC), NORAD (Norway), CIDA (Canada), and UNFPA.

We would also like to acknowledge ORC Macro for technical backstopping, and the assistance of the staff of the National Statistical Office, the Ministry of Health and Population, Department of Population Services in the Ministry of Economic Planning and Development, all members of the steering committee and various technical working groups. We also appreciate the work done by the Community Health Services Unit (CHSU), and especially commend the laboratory team assigned to work on the blood samples for their tireless efforts in getting the testing done successfully.

Finally, we are grateful to the survey respondents who generously gave their time to provide the information that forms the basis of this report.

Charles Machinjili
Commissioner for Statistics

SUMMARY OF FINDINGS

The 2004 Malawi Demographic and Health Survey (MDHS) is a nationally representative survey of 11,698 women age 15-49 and 3,261 men age 15-54. The main purpose of the 2004 MDHS is to provide policymakers and programme managers with detailed information on fertility, family planning, childhood and adult mortality, maternal and child health, as well as knowledge of and attitudes related to HIV/AIDS and other sexually transmitted infections (STIs). The 2004 MDHS is designed to provide data to monitor the population and health situation in Malawi as a followup of the 1992 and 2000 MDHS surveys, and the 1996 Malawi Knowledge, Attitudes, and Practices in Health Survey. New features of the 2004 MDHS include the collection of information on use of mosquito nets, domestic violence, anaemia testing of women and children under 5, and HIV testing of adults.

The 2004 MDHS survey was implemented by the National Statistical Office (NSO). The Ministry of Health and Population, the National AIDS Commission (NAC), the National Economic Council, and the Ministry of Gender contributed to the development of the questionnaires for the survey. Most of the funds for the local costs of the survey were provided by multiple donors through the NAC. The United States Agency for International Development (USAID) provided additional funds for the technical assistance through ORC Macro. The Department for International Development (DfID) of the British Government, the United Nations Children's Fund (UNICEF), and the United Nations Population Fund (UNFPA) also provided funds for the survey. The Centers of Disease Control and Prevention provided technical assistance in HIV testing.

The survey used a two-stage sample based on the 1998 Census of Population and Housing and was designed to produce estimates for key indicators for ten large districts in addition to estimates for national, regional, and urban-rural domains. Fieldwork for the 2004 MDHS was carried out by 22 mobile interviewing teams. Data collection commenced on 4 October 2004 and was completed on 31 January 2005.

FERTILITY

Fertility Levels and Trends. While there has been a significant decline in fertility in the past two decades from 7.6 children in the early 1980s to 6.0 children per woman in the early 2000s, compared with selected countries in Eastern and Southern Africa, such as Zambia, Tanzania, Mozambique, Kenya, and Uganda, the total fertility rate (TFR) in Malawi is high, lower only than Uganda (6.9).

Fertility Differentials. Fertility varies substantially across residence. Urban women have, on average, more than two children fewer than rural women (4.2 and 6.4, respectively). While the TFR in the Central Region is 6.4, in the Southern and Northern Regions it is only 5.8 and 5.6 births per woman, respectively. Among the ten oversampled districts, TFR varies from 4.8 births per woman in Blantyre to 7.2 births per woman in Mangochi.

As expected, fertility is strongly associated with education and wealth status. The TFR decreases dramatically from 6.9 for women with no education to 3.8 for women with at least some secondary education. The TFR for women in the lowest (poorest) quintile is 7.1 births per woman, compared with 4.1 births for women in the highest (richest) quintile.

Unplanned Fertility. Despite increasing use of contraception, the 2004 MDHS data indicate that unplanned pregnancies are common in Malawi. Twenty percent of births in the five years preceding the survey are not wanted and 21 percent are mistimed (wanted later). The percentage of recent births that are not wanted increased from 14 percent in 1992 to 22 percent in 2000, and declined to 20 percent in 2004.

Fertility Preferences. The 2004 MDHS finding indicates that 35 percent of women wanted no more children and therefore want to limit the family size at its current level, and 6 percent had already been sterilised. Thirty-eight percent of men also report wanting no more children. There has been a decline in fertility preferences among currently married women since 2000. The average ideal family size for all women was 5.0 children in 2000 and was 4.1 in 2004. For all men, ideal family size declined from 4.8 children in 2000 to 4.0 in 2004.

FAMILY PLANNING

Knowledge of Contraception. Knowledge of family planning is nearly universal, with 97 percent of women age 15-49 and 97 percent of men age 15-54 knowing at least one modern method of family planning. The most widely known modern methods of contraception among all women are injectables (93 percent), the pill and male condom (90 percent each), and female sterilisation (83 percent). The male condom is the most widely known contraceptive method (72 percent) among women with no sexual experience. These findings are similar to those in the 2000 MDHS.

Use of Contraception. One in three married women (33 percent) in Malawi is using a method of family planning. Most of these women are using a modern method (28 percent). Injectables, female sterilisation, and the pill are the most commonly used

contraceptive methods, used by 18, 6, and 2 percent of married women, respectively. The most commonly used methods for sexually active unmarried women are injectables (11 percent) and male condoms (10 percent).

Trends in Contraceptive Use. Contraceptive use among married women in Malawi has increased slightly from 31 percent in 2000 to 33 percent in 2004. This is a much slower increase than between 1992 and 2000 (13 and 31 percent, respectively). There is a notable rise in the use of modern methods from 7 percent in 1992 to 28 percent in 2004, mostly because of a sharp increase in the use of injectables and female sterilisation. The use of male condoms remained unchanged at 2 percent.

Differentials in Contraceptive Use. Use of a modern contraceptive method is higher among currently married women in urban areas than women in rural areas (35 and 27 percent, respectively). The highest levels of use of modern family planning methods are in Lilongwe and Blantyre (each 34 percent), and the lowest levels are in Mangochi (17 percent) and Salima (20 percent).

Use of modern family planning methods is slightly higher in the Central Region (30 percent) and the Northern Region (29 percent) than in the Southern Region (27 percent). The same pattern was seen in the 2000 MDHS. Use of traditional methods is more common in the Northern Region (13 percent) than in the other regions (3 percent or less). In the Northern Region, withdrawal is the traditional method most commonly used (10 percent).

Modern contraceptive methods increase with the woman's education and wealth status. Twenty-two percent of married women in the lowest wealth quintile use a modern family planning method, and the corresponding proportion for those in the highest wealth quintile is 38 percent.

Source of Modern Methods. In Malawi, 67 percent of current users of modern methods obtain their methods from a public facility. This is about the same proportion captured in the 2000 MDHS (68 percent). Thirteen percent of all current users get their methods from religious (mission) facilities, 4 percent from the private medical sector, and 17 percent from other sources including nongovernmental organizations (NGOs), where Banja La Mtsogolo is the most commonly used source (13 percent).

Contraceptive Discontinuation Rates. Thirty-six percent of contraceptive users discontinue use of a method within a year after beginning to use the method. The 12-month discontinuation rate for modern contraceptives is highest for the male condom (62 percent), followed by the pill (52 percent) and injectables (33 percent). Eight percent of the users report that they stopped using a method because of the desire to get pregnant. Twenty percent gave other reasons for discontinuing.

Unmet Need for Family Planning. Unmet need for family planning services is defined as the percentage of currently married women who either do not want any more children or want to wait before having their next birth, but are not using any method of family planning. The 2004 MDHS shows that 28 percent of married women have an unmet need for family planning services: 17 percent for spacing births and 10 percent for limiting births. The total demand for family planning among married women increased from 60 percent in 2000 to 62 percent in 2004.

MATERNAL HEALTH

Antenatal Care. There has been little change in the coverage of antenatal care (ANC) from a medical professional since 2000 (93 percent in 2004 compared with 91 percent in 2000). Most women receive ANC from a nurse or a midwife (82 percent), although 10 percent go to a doctor or a clinical officer. A

small proportion (2 percent) receives ANC from a traditional birth attendant, and 5 percent do not receive any ANC. Only 8 percent of women initiated ANC before the fourth month of pregnancy, a marginal increase from 7 percent in the 2000 MDHS.

Eighty-five percent of women received at least one tetanus toxoid injection during pregnancy for their most recent birth in the five years preceding the survey. The coverage of tetanus toxoid injection has not changed since 1992 (85-86 percent). Two in three women had two or more doses of tetanus toxoid injections. This figure is lower than that reported in the 1992 MDHS (73 percent).

With regard to malaria prevention during pregnancy, the 2004 MDHS data show that 81 percent of pregnant women took an antimalarial drug and 43 percent of women received two or more doses of intermittent preventive treatment (IPT), at least once during an ANC visit.

Delivery Care. The majority of births were attended by medical professionals, 50 percent by a nurse or midwife, 6 percent by a doctor/clinical officer, and only 1 percent by a patient attendant. There has been a slight increase in the proportion of births that are attended by a doctor/clinical officer from 4 percent in 2000 to 6 percent in 2004. The role of traditional birth attendants in assisting delivery also increased from 23 percent in 2000 to 26 percent in 2004. Similar to that recorded in the 2000 MDHS, 3 percent of births in the five years preceding the survey were delivered by C-section.

Postnatal Care. Postnatal care is recommended to start immediately after the birth of the baby and placenta to 42 days after delivery. The 2004 MDHS shows that seven in ten women did not receive postnatal care. Among those who had postnatal care (31 percent), 21 percent received care within two days of delivery. Few women had a

checkup 3-6 days after delivery, and 8 percent received care between the first and sixth week after delivery.

Adult and Maternal Mortality. Comparison of data from the 2000 and 2004 MDHS surveys indicates that mortality for both women and men has remained at the same levels since 1997 (11-12 deaths per 1,000). Data on the survival of respondents' sisters were used to calculate a maternal mortality ratio for the 7-year period before the survey, centered in mid-2001. Using direct estimation procedures, the maternal mortality ratio (MMR) is estimated to be 984 maternal deaths per 100,000 live births. The MMR based on the 2000 MDHS is significantly higher than that calculated from the 1992 MDHS (620 maternal deaths per 100,000 live births), but lower than the rate from the 2000 MDHS survey of 1,120 maternal deaths per 100,000 live births. It is unlikely that maternal mortality has changed so dramatically up and then down again, especially because the reference periods for the estimates overlap each other. MMRs measured in this way are subject to very high sampling errors and cannot adequately indicate short-term trends.

CHILD HEALTH

Childhood Mortality. Data from the 2004 MDHS show that for the 2000-2004 period, the infant mortality rate is 76 per 1,000 live births, child mortality is 62 per 1,000, and the under-five mortality rate is 133 per 1,000 live births. This means that about one in every eight children born in Malawi dies before reaching their fifth birthday. The estimate of under-five mortality calculated from the 1992 MDHS data (for the period 1988-1992) is 234 and from the 2000 MDHS data (1996-2000) is 189 per 1,000 live births. These figures suggest that the decline between 2000 and 2004 is faster than between 1992 and 2000 (29 and 19 percent, respectively). During the 15-year period preceding the survey, the estimates of

neonatal mortality show a decline of 36 percent (from 42 to 27 per 1,000 live births).

Childhood Vaccination Coverage. In the 2004 MDHS, mothers were able to show a health card with immunisation data for 74 percent of children age 12-23 months. This is lower than that recorded in 1992 and 2000 (86 and 81 percent, respectively). Sixty-four percent of children 12-23 months are fully vaccinated against six major childhood illnesses (tuberculosis, diphtheria, pertussis, tetanus, polio, and measles). Nine in ten of these children have been vaccinated against tuberculosis, 95 percent received polio 1 and DPT 1. Comparison with estimates of coverage of specific vaccines based on the 1992 and 2000 MDHS data show that the immunisation coverage for children has declined over time.

Child Illness and Treatment. Acute respiratory infections (ARI), diarrhoea, and malaria are common causes of child death. In the two weeks before the survey, 19 percent of children under five years of age were ill with a cough and short, rapid breathing, 37 percent of children had fever, and 22 percent of children experienced diarrhoea. Among children with symptoms of ARI and/or fever, 20 percent were taken to a health facility, as were 36 percent of children with diarrhoea. Cough and diarrhoea are highest among children age 6-11 months. More than half (61 percent) of children with diarrhoea were treated with ORS (solution prepared from oral rehydration salts), 70 percent were given either ORS or increased fluids, and 18 percent received no treatment. Among children with fever, 57 percent were given an antimalarial drug, and 46 percent were given the drug on the same day or the following day. One in five children under age five years slept under a mosquito net the night before the survey, and most of them (18 percent) slept under an insecticide-treated net.

NUTRITION

Breastfeeding Practices. Breastfeeding is nearly universal in Malawi. Ninety-eight percent of children are breastfed for some period of time. The median duration of breastfeeding in Malawi in 2004 is 23.2 months, one month shorter than in 2000. The median duration of exclusive breastfeeding is 2.5 months, whereas the median for predominant breastfeeding is 4.8 months, twice as long as that recorded in 2000. More than half (53 percent) of children under six months are exclusively breastfed compared with 45 percent in the 2000 MDHS. Bottle-feeding is uncommon in Malawi. Use of feeding bottles in children under age six months has remained at the same level as in the 2000 MDHS (3 percent).

Intake of Vitamin A. The Ministry of Health's policy is to supplement children age 6-59 months with a dose of vitamin A capsules once every six months. The 2004 MDHS shows that 65 percent of children under age three had consumed foods rich in vitamin A in the seven days preceding the survey and 65 percent of children had received a vitamin A capsule in the last six months before the survey. Furthermore, 41 percent of women received a vitamin A supplement during the postnatal period. This is the same level as that recorded in the 2000 MDHS.

Nutritional Status of Children. The 2004 MDHS shows that the nutritional status of children under five has not improved since 1992. At the national level, 48 percent of children under five in Malawi are stunted, or too short for their age, 5 percent of children are wasted or too thin, and 22 percent are underweight. For the first time in Malawi, the DHS collected blood samples to be tested for haemoglobin level, a measurement of anaemia. The survey found that 73 percent of children age 6-59 months are anaemic: 26 percent have mild anaemia, 42 percent have moderate anaemia, and 5 percent have severe anaemia.

Nutritional Status of Women. The nutritional status of women in Malawi has remained constant since 2000; the mean height of mothers is 156 centimetres. The cut-off point, below which a woman is considered at risk, is between 140 and 150 centimetres. Three percent of women are less than 145 centimetres in height., The 2004 MDHS used the body mass index (BMI)—defined as weight in kilograms divided by height squared in metres, to assess thinness and obesity. A cut off point of 18.5 is used to define chronic energy deficiency. The mean BMI among the weighed and measured women in the 2004 MDHS is 22, with 77 percent of women classified as normal (BMI 18.5-24.9) and 9 percent are considered thin (BMI below 18.5). Fourteen percent of women in Malawi are classified as overweight or obese (BMI 25.0 or higher). The survey also found that 45 percent of women are anaemic: 33 percent have mild anaemia, 11 percent have moderate anaemia, and 2 percent have severe anaemia.

HIV/AIDS

Awareness of AIDS. Knowledge of AIDS among women and men in Malawi is almost universal. This is true across age group, urban-rural residence, marital status, wealth index, and education. Nearly half of women and six in ten men can identify the two most common misconceptions about the transmission of HIV—HIV can be transmitted by mosquito bites, and HIV can be transmitted by supernatural means—and know that a healthy-looking person can have the AIDS virus.

Attitudes Towards Persons with HIV. To gauge stigma associated with AIDS, the 2004 MDHS asked respondents who had heard of HIV/AIDS about their attitudes towards people with HIV. These questions include whether respondents would be willing to take care of orphaned children of family member who died of HIV, whether they would buy fresh vegetables from a shopkeeper who is

infected with HIV, and whether they believe an HIV-positive female teacher should be allowed to keep on teaching. Almost all women and men age 15-49 (94 and 97 percent, respectively) say that they are willing to take care of orphaned children of a family member who died of AIDS. About two in three women and 84 percent of men say they would buy fresh vegetables from a shopkeeper who is HIV-positive. Two in three women and 80 percent of men say that an HIV-positive female teacher should be allowed to keep teaching. Sixty-five percent of women and 48 percent of men say that they would not necessarily fear disclosure of a family member's HIV-positive status. Looking at all of the stigmas attached to persons with AIDS, 31 percent of women age 15-49 and 30 percent of men age 15-49 expressed acceptance of all four measures of stigma.

HIV-Related Behavioural Indicators.

Three in four women agree that HIV can be transmitted by breastfeeding, while about four in ten said the risk of mother-to-child transmission (MTCT) can be reduced by the mother taking drugs during pregnancy, and 37 percent reported both, that HIV can be transmitted by breastfeeding and the risk of MTCT can be reduced by the mother taking special drugs during pregnancy. Sixty-seven percent of men say that HIV can be transmitted by breastfeeding, 35 percent say that the risk of MTCT can be reduced by the mother taking drugs during pregnancy, and 29 percent report that HIV can be transmitted by breastfeeding and that the risk of MTCT can be reduced by taking special drugs during pregnancy.

Delaying the age at which young persons become sexually active is an important strategy for reducing the risk of contracting a sexually transmitted infection (STI). In Malawi, 15 percent of women age 15-24 and 14 percent of men age 15-24 have had sex by age 15.

Sexual intercourse with a nonmarital or noncohabiting partner is associated with an increase in the risk of contracting an STI. Eight percent of women and 27 percent of men engaged in higher-risk sexual behaviour in the last 12 months. Higher-risk sexual behaviour is even more common among youth age 15-24. Fourteen percent of young women and 62 percent of young men age 15-24 engaged in higher-risk sexual activity in the 12 months preceding the survey. Only 39 percent of young women and 46 percent of young men reported using a condom at last higher-risk sexual intercourse.

HIV Testing. To gauge the coverage of HIV testing, respondents in the 2004 MDHS were asked if they had ever been tested to see if they have the AIDS virus. Those who had been tested were asked when they were last tested, whether they had asked for the test or were required to take it, and whether they received their results. Thirteen percent of women age 15-49 and 15 percent of men age 15-49 have been tested for HIV and received the test results. Additionally, 2 percent of women and 2 percent of men were tested but never received the result.

HIV Prevalence. One in three households in the 2004 MDHS sample was selected for individual interviews with male respondents. All men age 15-54 in these households were eligible for individual interview. In the same households, all women age 15-49 and all men age 15-54 were asked to voluntarily provide some drops of blood for HIV testing in the laboratory. Results indicate that 12 percent of adults age 15-49 in Malawi is infected with HIV. HIV prevalence is higher among women than among men (13 and 10 percent, respectively). Prevalence peaks at 19 percent for adults age 30-34, 18 percent for women, and 20 percent for men.

Patterns of HIV Prevalence. Prevalence is higher in urban areas than in rural areas. While 18 percent of urban women are HIV

positive, the corresponding proportion for rural women is 13 percent. For men, the urban-rural difference in HIV prevalence is even greater; urban men are nearly twice as likely to be infected as rural men (16 and 9 percent, respectively). HIV prevalence among women is higher in the Southern Region (20 percent) than in the Northern (10 percent) or Central (7 percent) Regions. The same pattern is observed for men, HIV prevalence is higher in Southern Region (15 percent) than in Central (6 percent) and Northern (5 percent) Regions. In Malawi, circumcised men have a slightly higher HIV infection rate than men who are not circumcised (13 and 10 percent, respectively). Among couples, 83 percent are both HIV negative, and 7 percent are both HIV positive. Ten percent of the couples are discordant, that is, one partner is infected and the other not.

GENDER-RELATED VIOLENCE

Violence since Age 15. Gender-related violence refers to any act of violence that results in, or is likely to result in, physical, sexual, or psychological harm or suffering to women. Domestic violence has negative health consequences on the victims and on the reproductive health of women. In response to the international and regional instruments on women's rights, the Malawi government and its stakeholders started to implement various initiatives aimed at creating awareness on the dangers of gender-based violence. In the 2004 MDHS, women were asked if they had experienced any physical violence since age 15. The data show that 28 percent of women experienced physical violence since age 15 and 15 percent experienced it in the 12 months preceding the survey.

Marital Violence. Seventy-seven percent of ever-married women who experienced physical violence report their husbands as the perpetrators of the violence. The survey further found that 13 percent of ever-married women report to have ever

experienced emotional violence, 20 percent experienced physical violence, and 13 percent experienced sexual violence. About one-third of women (30 percent) experienced at least one of the three forms of violence, and 4 percent experience all three forms of violence. The common form of spousal violence is slapping and arm twisting (16 percent) and forced intercourse or marital rape (13 percent). The 2004 MDHS results show that 39 percent of women were physically or sexually violated once or twice in the 12 months preceding the survey, 21 percent three to five times, and 10 percent more than five times. The factor most strongly related to marital violence is husband's alcohol and/or drug use. Violence is more than twice as prevalent among women who say their husband gets drunk very often as among those whose husbands do not drink.

Help-seeking Behaviour among Women who Experienced Violence. Less than half of women who experienced violence actually sought help (42 percent). Of these women, 44 percent sought help from relatives or friends, one in three sought help from their own family, and 11 percent sought help from their in-laws.

MALARIA

Mosquito Nets. The use of insecticide-treated mosquito nets (ITNs) is a primary health intervention proven to reduce malaria transmission. The 2004 MDHS found that 42 percent of households in Malawi own at least one mosquito net, 29 percent of households own at least one ever-treated mosquito net, and 12 percent of households own an ITN. In one in five households the interviewer observed the mosquito nets. Among the observed nets, 21 percent are blue, 74 percent are green, and 5 percent are white. Most nets (71 percent) are rectangular. About one in four of the observed nets had at least one hole. Of the households that have no mosquito nets, 38 percent prefer a blue net and 41 percent prefer a green net. Forty-five percent of households with no mosquito net prefer a

conical net while 43 percent prefer a rectangular net.

One in five children under five years in Malawi slept under a mosquito net the night before the survey. Most of these children (18 percent) slept under an ever-treated net and 15 percent slept under an ITN. There is a small difference in the use of mosquito nets between pregnant women (19 percent) and all women (21 percent).

Intermittent Preventive Treatment during Pregnancy. In Malawi, as a protective measure against various adverse outcomes of pregnancy, it is recommended that pregnant women receive at least two doses of sulfadoxine-pyrimethamine (SP), one in the second trimester and one in the third trimester. The 2004 MDHS data show that 81 percent of pregnant women in Malawi take an antimalarial drug for prevention during pregnancy—almost all take SP/Fansidar (79 percent)—and most women receive the drug during an ANC visit. Less than half (47 percent) of the women receive the recommended two or more doses of SP/ Fansidar.

Prevalence and Management of Malaria in Children. The survey found that 37 percent of children had fever and/or convulsions in the two weeks preceding the survey. Of the children that had fever, 57 percent were given an antimalaria drug and 46 percent were given the medication the same or the following day. Children with fever were given quinine (45 percent), amodiaquine (39 percent), or SP/Fansidar (23 percent). One in five children were given medication (modern pharmaceutical or traditional) that was obtained at home, 39 percent of the children were given medicine that was bought at a pharmacy or shop (without a prescription), and 31 percent were taken to a health centre. Six percent of children with fever were not treated.

MEN'S PARTICIPATION IN HEALTH CARE

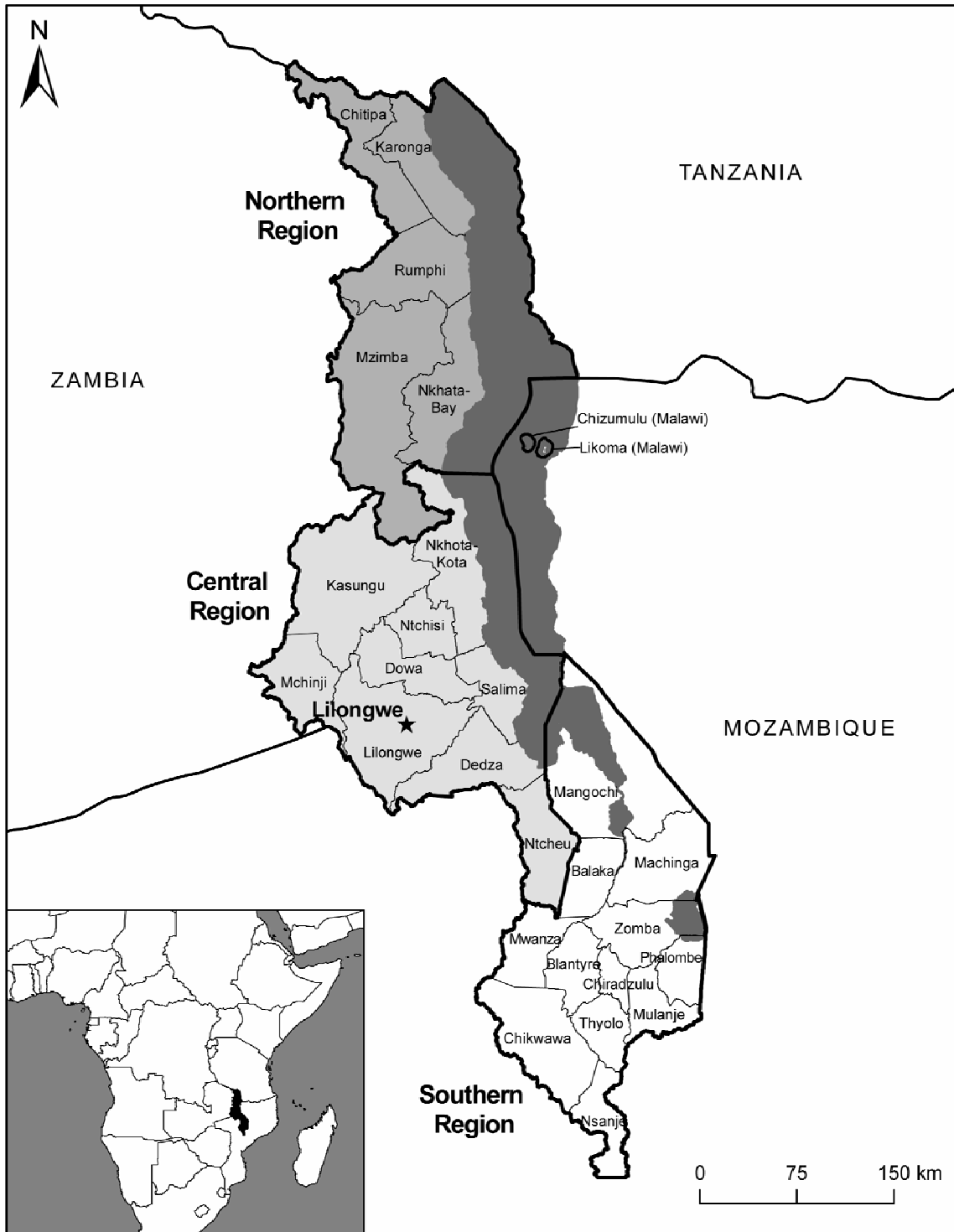
Reproductive Health Care. The 2004 MDHS collected information on men's participation in their wives and children's health care. This information helps family planning and health programme managers in investigating men's role in taking care of the health of their family. When asked about antenatal care, 96 percent of fathers reported that the mother of their last child born in the five years preceding the survey received care from a health professional. This was almost the same as the response given by women (93 percent). For delivery assistance by a health care provider, 74 percent of men reported this response compared with 57 percent of women. Differences in question wording may account for differences in reporting by men and women. It should also be noted that fathers and mothers may not necessarily be reporting on the same child.

Main Provider during Pregnancy, Delivery and after Delivery. The majority of men with a child born in the past five years reported that free services were received for antenatal care for 76 percent of pregnancies, delivery care for 66 percent of births, and postnatal care for 86 percent of births. Fathers reported providing payment for antenatal care for 19 percent of pregnancies, delivery care for 27 percent of births, and postnatal care for 12 percent of births.

Decisionmaker on Child's Health Care. The 2004 MDHS also collected information from fathers on who usually decides about their children's health care. Questions were specifically asked about the health care for their youngest child under five. In 87 percent of cases, fathers reported that they decide about the health care for their children; mothers do so in 64 percent of cases.

Knowledge of Signs of Danger in Pregnancy. The results from the 2004 MDHS show that men's knowledge of danger signs in pregnancy is limited. Two in three men have no knowledge of any danger signs or symptoms that indicate that a pregnancy may be at an elevated risk. The most often cited sign of pregnancy complication is vaginal bleeding, with 11 percent of men reporting this complication.

MALAWI



INTRODUCTION

Derek Zanera

1.1 GEOGRAPHY, HISTORY, AND THE ECONOMY

1.1.1 Geography

Malawi is a landlocked country south of the equator in sub-Saharan Africa. It is bordered to the north and northeast by the United Republic of Tanzania; to the east, south, and southwest by the People's Republic of Mozambique; and to the west and northwest by the Republic of Zambia.

The country is 901 kilometres long and ranges in width from 80 to 161 kilometres. The total area is 118,484 square kilometres of which 94,276 square kilometres is land area. The remaining area is mostly composed of Lake Malawi, which is about 475 kilometres long and runs down Malawi's eastern boundary with Mozambique.

Malawi's most striking topographic feature is the Rift Valley, which runs the entire length of the country, passing through Lake Malawi in the Northern and Central Regions to the Shire Valley in the south. The Shire River drains the water from Lake Malawi into the Zambezi River in Mozambique. To the west and south of Lake Malawi lie fertile plains and mountain ranges whose peaks range from 1,700 to 3,000 metres above sea level.

The country is divided into three regions: the Northern, Central, and Southern Regions. There are 28 districts in the country. Six districts are in the Northern Region, nine are in the Central Region, and 13 are in the Southern Region. Administratively, the districts are subdivided into traditional authorities (TAs), presided over by chiefs. Each TA is composed of villages, which are the smallest administrative units and are presided over by village headmen.

Malawi has a tropical, continental climate with maritime influences. Rainfall and temperature vary depending on altitude and proximity to the lake. From May to August, the weather is cool and dry. From September to November, the weather becomes hot. The rainy season begins in October or November and continues until April.

1.1.2 History

Malawi was under British rule from 1891 until July 1964 under the name of the Nyasaland Protectorate. In 1953 the Federation of Rhodesia and Nyasaland was created, which was composed of three countries, Southern Rhodesia (now Zimbabwe), Northern Rhodesia (now Zambia), and Nyasaland (now Malawi). In July 1964 Nyasaland became the independent state of Malawi and gained republic status in 1966.

In 1994 Malawi adopted a multiparty system and a strategy to eradicate poverty. Since then, it has introduced free primary school education, a free market economy, a bill of rights, and a parliament with three main parties. Over the past ten years, the country has experienced a considerable increase of rural-to-urban migration.

1.1.3 Economy

Malawi has a predominantly agricultural economy. Agricultural produce accounted for 70 percent of Malawi exports in 2004, tobacco, tea, and sugar being the major export commodities. The country is largely self-sufficient with regard to food, but due to the high cost of fertilizer, coupled with erratic rains for the past three years, Malawi is experiencing food insecurity, making it largely dependent on imported maize from South Africa.

1.2 POPULATION

The major source of historical demographic data comes from the population census, which was taken every ten years from 1891 to 1931. Since World War II, population censuses were conducted in 1945, 1966, 1977, 1987, and 1998. Other sources of population data include nationwide surveys, such as the 1992 Malawi Demographic and Health Survey (MDHS); the 1996 Malawi Knowledge Attitudes, and Practices in Health survey (MKAPH); and the 2000 MDHS. Table 1.1 provides some demographic indicators for Malawi based on various data sources.

The population of Malawi grew from 8.0 million in 1987 to 9.9 million in 1998, as enumerated by the 1998 Population and Housing census, representing an increase of 24 percent, or an intercensal population growth rate of 2 percent per year. Population density increased from 85 persons per square kilometre in 1987 to 105 persons per square kilometre in 1998.

To address problems associated with rapid population growth, in 1994 the Malawi government adopted the National Population Policy, which was designed to reduce population growth to a level compatible with Malawi's social and economic goals (OPC, 1994). The policy's objectives are to improve family planning and health care programmes, to increase school enrolment with an emphasis on raising the proportion of female students to 50 percent of total enrolment, and to increase employment opportunities, particularly in the private sector.

Table 1.1 Demographic indicators

Selected demographic indicators, Malawi 1998 national census and population projections 1999-2002

Indicator	Census Year		Projections		
	1998	1999	2000	2001	2002
Population (midyear population)	9,933,868	10,152,753	10,475,257	10,816,294	11,174,648
Intercensal growth rate	2.0	3.1	3.2	3.3	3.3
Total area (sq km)	118,484	118,484	118,484	118,484	118,484
Land area (sq km)	94,276	94,276	94,276	94,276	94,276
Density (population per sq km)	105	108	111	115	119
Percentage of urban population	14.0	14.3	14.8	15.2	15.7
Women of childbearing age as a percentage of female population	47.2	48.2	49.8	51.4	53.1
Sex ratio	96.0	96.2	96.3	96.4	96.4
Crude birth rate	37.9	52.3	51.9	51.4	50.8
Total fertility rate	6.2	6.7	6.7	6.6	6.5
Crude death rate	21.1	23.1	21.8	20.5	19.4
Infant mortality rate	121.0	91.4	89.5	87.6	85.7
Life expectancy:					
Male	40.0	41.1	41.7	42.3	42.8
Female	44.0	43.8	44.3	44.9	45.5

Source: National Statistical Office (NSO). 1998 Population Projections for Malawi 1999 to 2023 based on the Population and Housing Census.

1.3 OBJECTIVE OF THE SURVEY

The principal aim of the 2004 MDHS project was to provide up-to-date information on fertility and childhood mortality levels, nuptiality, fertility preferences, awareness and use of family planning methods, use of maternal and child health services, and knowledge and behaviours related to HIV/AIDS and other sexually transmitted infections. It was designed as a follow-on to the 2000 MDHS survey, a national-level survey of similar scope. The 2004 MDHS survey, unlike the 2000 MDHS, collected blood samples which were later tested for HIV in order to estimate HIV prevalence in Malawi. In broad terms, the 2004 MDHS survey aimed to:

- Assess trends in Malawi's demographic indicators, principally fertility and mortality
- Assist in the monitoring and evaluation of Malawi's health, population, and nutrition programmes
- Advance survey methodology in Malawi and contribute to national and international databases
- Provide national-level estimates of HIV prevalence for women age 15-49 and men age 15-54.

In more specific terms, the 2004 MDHS survey was designed to:

- Provide data on the family planning and fertility behaviour of the Malawian population and thereby enable policymakers to evaluate and enhance family planning initiatives in the country
- Measure changes in fertility and contraceptive prevalence and analyse the factors that affect these changes, such as marriage patterns, desire for children, availability of contraception, breastfeeding habits, and important social and economic factors
- Examine basic indicators of maternal and child health and welfare in Malawi, including nutritional status, use of antenatal and maternity services, treatment of recent episodes of childhood illness, and use of immunisation services. Particular emphasis was placed on malaria programmes, including malaria prevention activities and treatment of episodes of fever.
- Provide levels and patterns of knowledge and behaviour related to the prevention of HIV/AIDS and other sexually transmitted infections
- Provide national estimates of HIV prevalence
- Measure the level of infant and adult mortality including maternal mortality at the national level
- Assess the status of women in the country.

1.4 ORGANISATION OF THE SURVEY

The 2004 MDHS survey was a comprehensive survey that involved several agencies. The National Statistical Office (NSO) had primary responsibility for conducting the survey. The Ministry of Health and Population, the National AIDS Commission (NAC), the National Economic Council, and the Ministry of Gender also contributed to the development of the questionnaires for the survey. Most of the funds for the local costs of the survey were provided by multiple donors through NAC. Financial support for the survey was also provided by the United States Agency for International Development (USAID), the United Kingdom's Department for International Development (DFID), the United Nations Children's Fund (UNICEF/Malawi) and United Nations Population Fund (UNFPA). Technical assistance was provided by ORC Macro through the USAID-funded MEASURE DHS project based in Calverton, Maryland, USA. The Centers for Disease Control and Prevention provided technical assistance in HIV testing.

1.4.1 Sample Design

The 2004 MDHS survey was designed to provide estimates of health and demographic indicators at the national and regional levels, for rural and urban areas, and for selected large districts that were oversampled. To meet this objective, 522 clusters were drawn from the 1998 census sample frame: 458 in rural areas and 64 in urban areas. The following districts were oversampled in the 2004 MDHS in order to produce reliable district level estimates; Mulanje, Thyolo, Kasungu, Salima, Machinga, Zomba, Mangochi, Mzimba, Blantyre, and Lilongwe.

The National Statistical Office staff conducted an exhaustive listing of households in each of the MDHS clusters in August and September 2004. From these lists, a systematic sample of households was drawn for a total of 15,091 households. All women age 15-49 in the selected households were eligible for individual interview. Every third household in the 2004 MDHS sample was selected for the male survey. In these households, all men age 15-54 were eligible for individual interview and HIV testing. In the same households, all women age 15-49 were eligible for HIV testing.

During data collection, field staff used global positioning system (GPS) receivers to establish and record geographic coordinates of each of the MDHS clusters.

1.4.2 Questionnaires

Three types of questionnaires were used in the 2004 MDHS survey: the Household Questionnaire, the Women's Questionnaire, and the Men's Questionnaire. The contents of the questionnaires were based on the MEASURE DHS model questionnaires, which were adapted for use in Malawi in collaboration with a wide range of stakeholders. The MDHS survey instruments were translated into and printed in Chichewa and Tumbuka for pretesting.

The Household Questionnaire was used to list all of the usual members and visitors in the selected households. Basic information on each person listed was collected, including age, sex, education, and relationship to the head of the household. Height and weight measurements were taken for all women age 15-49 and all children under the age of five. Respondents to the Household Questionnaire were asked questions on child labour for each child ages 5-14 living in the household or who spent the preceding night in the household. In addition, information was collected about the dwelling itself such as the source of water, type of toilet facilities, materials used to construct the

house, ownership of various consumer goods, and use of bed nets. The Household Questionnaire was also used to identify persons eligible for individual interview: women age 15-49 and men age 15-54. One woman in each household was selected for the interview on domestic violence.

The Women's Questionnaire was used to collect information from women age 15-49 and included questions on the following topics:

- Background characteristics (age, education, religion, etc.)
- Reproductive history (to arrive at fertility and childhood mortality rates)
- Knowledge and use of family planning methods
- Antenatal, delivery, and postnatal care
- Infant feeding practices, including patterns of breastfeeding
- Vaccinations
- Episodes of childhood illness and responses to illness, with a focus on treatment of fevers in the last two weeks
- Marriage and sexual activity
- Fertility preferences
- Husband's background and the woman's work status
- Woman's status and decisionmaking
- Mortality of adults, including maternal mortality
- AIDS-related knowledge, attitudes, and behaviour
- Domestic violence

The Men's Questionnaire was much shorter than the Women's Questionnaire, but covered many of the same topics, excluding the detailed reproductive history and sections dealing with maternal and child health and adult and maternal mortality.

1.4.3 Pretest

Twelve NSO permanent staff were recruited as interviewers for the DHS pretest of the questionnaires, which was conducted in June and July 2004. The 12 interviewers were trained in conducting interviews and taking blood samples for anaemia and HIV testing. The training took place at the NSO offices for a period of two weeks. The interviewers were split into three teams to conduct interviews in the Northern Region, Central Region, and Southern Region, respectively. During the pretest fieldwork, 206 Household Questionnaires, 160 Women's Questionnaires, and 154 Men's Questionnaires were completed. Based on the observations in the field and suggestions

made by the pretest field teams, revisions were made in some skip patterns, wording, and translations of the questionnaires.

1.4.4 Training

A total of 180 people were recruited by NSO for the main training. Training was held for five weeks at Magomero College, south of Zomba town. The first week of training was devoted to the collection of blood samples. Sixty persons were trained to collect blood samples, 34 of whom had medical training and 26 with no medical training. These participants were joined in subsequent weeks by 120 persons who were trained as interviewers only.

The second phase of training focused on interviewing the respondents and taking height and weight measurements. Initially, training consisted of lectures on the underlying rationale of the questionnaires' content and how to complete the questionnaires. Guest lecturers were invited to give talks on specific subjects such as family planning and gender issues, in particular domestic violence. Mock interviews were conducted between participants to allow practice in proper interviewing techniques and the use of local language questionnaires. Throughout the training, participants were given tests to evaluate their understanding and skills in the survey procedures. Toward the end of training, participants spent several days practicing interviews near the training centre.

1.4.5 Data Collection and Data Processing

Fieldwork for the 2004 MDHS was carried out by 22 mobile teams, each consisting of one supervisor, one field editor, four or five female interviewers, and one male interviewer. Two or three of the interviewers on each team were trained in taking blood samples, and at least one of these was medically trained. Four senior NSO staff and one from Ministry of Health and Population supervised and coordinated fieldwork activities. In addition, three health technicians were assigned to supervise the blood collection for anaemia and HIV testing. Fieldwork commenced on 4 October 2004 and was completed by 31 January 2005.

All questionnaires for the MDHS were returned to the NSO central office in Zomba for data processing. The processing operation consisted of office editing, coding of open-ended questions, data entry, double entry verification, and editing inconsistencies found by computer programs developed for the MDHS. The MDHS data entry and editing programs used CSPro, a computer software package specifically designed for processing survey data such as that produced by DHS surveys. Data processing commenced one month after fieldwork and was completed in May 2005. Testing of blood samples started in May 2005 and was completed in June 2005.

Table 1.2 shows the results of household and individual interviews for Malawi as a whole and for urban and rural areas. A total of 15,041 households were selected in the MDHS sample, of which 13,965 were occupied. Of the occupied households, 13,664 were interviewed, yielding a household response rate of 98 percent. The household response rate is higher in rural areas.

In the 13,664 interviewed households, 12,229 women age 15-49 were identified as eligible for the individual interview, and interviews were completed for 11,698, for a 96 percent response rate. Of the 3,797 men age 15-54 who were identified as eligible for individual interview, 3,261 were interviewed, resulting in an 86 percent response rate. For both women and men, the main reason for nonresponse in the MDHS was failure to find the respondents despite repeated visits to the

household. Compared with the 2000 MDHS, the response rate for women declined from 98 to 96 percent and the response rate for men declined from 97 to 95 percent.

Table 1.2 Results of the household and individual interviews			
Number of households, number of interviews, and response rates, according to residence, Malawi 2004			
Result	Residence		Total
	Urban	Rural	
Household interviews			
Households selected	1,984	13,057	15,041
Households occupied	1,799	12,166	13,965
Households interviewed	1,724	11,940	13,664
Household response rate	95.8	98.1	97.8
Interviews with women			
Number of eligible women	1,733	10,496	12,229
Number of eligible women interviewed	1,640	10,058	11,698
Eligible woman response rate	94.6	95.8	95.7
Interviews with men			
Number of eligible men	632	3,165	3,797
Number of eligible men interviewed	507	2,754	3,261
Eligible man response rate	80.2	87.0	85.9

CHARACTERISTICS OF HOUSEHOLDS AND HOUSEHOLD MEMBERS

2

Isaac Dambula and Ephraim N.B. Chibwana

This chapter describes the demographic and socioeconomic characteristics of the population in the sampled households. It also examines environmental conditions, such as housing facilities and physical features of dwelling units. This information on the characteristics of the surveyed population is essential for the interpretation of survey findings and can provide an approximate indication of the representativeness of the MDHS survey.

For the 2004 MDHS survey, a household was defined as a person or a group of persons, related or unrelated, who live together in the same dwelling unit, who make common provisions for food and regularly take their food from the same pot or share the same grain store (*nkhoekwe*), or who pool their income for the purpose of purchasing food. The Household Questionnaire was used to collect information on all usual residents and visitors who spent the night preceding the survey in the household. This allows the analysis of either *de jure* (usual residents) or *de facto* (those who are there at the time of the survey) populations.

One of the background characteristics used throughout this report is the wealth index, which is a proxy of socioeconomic status. The index was developed and tested in a large number of countries in relation to inequities in household income, use of health services, and health outcomes (Rutstein et al., 2000). It is an indicator of the level of wealth that is consistent with expenditure and income measures (Rutstein, 1999). The index was constructed by applying principal components analysis to information on household assets. The asset information was collected in the Household Questionnaire of the 2004 MDHS and covers information on household ownership of a number of consumer items ranging from a paraffin lamp to a bicycle, motorcycle, or car, as well as dwelling characteristics, such as source of drinking water, sanitation facilities, and construction material used for flooring.

Each asset was assigned a weight (factor score) generated through principal components analysis, and the resulting asset scores were standardized in relation to a normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household; individuals were ranked according to the total score of the household in which they resided. The sample was then divided into quintiles—five groups with the same number of individuals in each—from one (lowest) to five (highest). A single asset index was developed for the whole sample; separate indices were not prepared for the urban and rural population separately.

2.1 HOUSEHOLD POPULATION BY AGE, SEX, AND RESIDENCE

The distribution of the household population in the 2004 MDHS survey is shown in Table 2.1 by five-year age groups, according to sex and urban-rural residence. The 13,664 households successfully interviewed in the 2004 MDHS were composed of 58,886 persons; 30,163 were women, representing 51 percent of the population, and 28,722 were men, representing 49 percent. The age structure of the population indicates that a larger proportion of the population falls into the younger age groups for each sex in both rural and urban areas as a result of relatively high fertility.

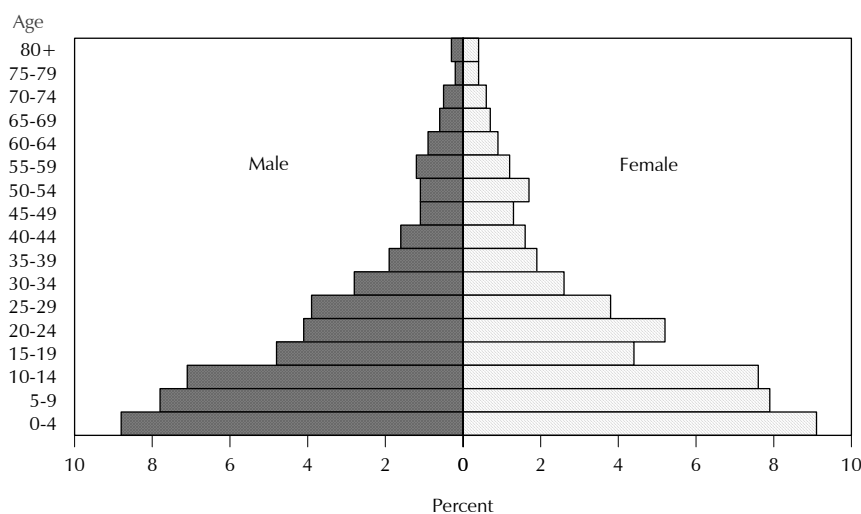
This pattern mirrors that seen in the 1998 Population and Housing Census, and can be seen in Figure 2.1, which shows that the population structure is much wider at the younger ages than at the older ages. There is no evidence of a tapering at the younger ages, which would be expected in a population with declining fertility rates (see Chapter 4). This indicates that Malawi's fertility decline is very recent and is not yet evident in the population structure.

Table 2.1 Household population by age, sex, and residence

Percent distribution of the *de facto* household population by five-year age groups, according to sex and residence, Malawi 2004

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	13.9	16.7	15.3	19.0	17.9	18.4	18.1	17.7	17.9
5-9	12.9	13.1	13.0	16.5	15.8	16.1	15.9	15.4	15.6
10-14	13.2	15.2	14.1	14.9	14.8	14.9	14.6	14.9	14.8
15-19	10.5	11.0	10.7	9.7	8.1	8.9	9.8	8.5	9.2
20-24	11.8	14.6	13.1	7.7	9.3	8.5	8.4	10.1	9.2
25-29	13.2	9.3	11.3	6.8	7.1	7.0	7.9	7.5	7.7
30-34	7.3	4.6	6.0	5.4	5.1	5.3	5.7	5.0	5.4
35-39	3.9	4.0	4.0	3.8	3.7	3.7	3.8	3.7	3.8
40-44	3.8	2.9	3.4	3.2	3.3	3.2	3.3	3.2	3.2
45-49	2.4	2.2	2.3	2.3	2.5	2.4	2.3	2.5	2.4
50-54	1.9	2.7	2.3	2.3	3.4	2.9	2.3	3.3	2.8
55-59	2.6	1.5	2.1	2.5	2.6	2.5	2.5	2.4	2.5
60-64	0.9	0.7	0.8	2.0	2.0	2.0	1.8	1.8	1.8
65-69	0.6	0.5	0.5	1.4	1.5	1.4	1.2	1.4	1.3
70-74	0.7	0.4	0.6	1.2	1.3	1.2	1.1	1.2	1.1
75-79	0.2	0.3	0.2	0.6	0.8	0.7	0.5	0.7	0.6
80 +	0.3	0.4	0.3	0.7	0.8	0.7	0.6	0.7	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	4,880	4,496	9,376	23,843	25,667	49,510	28,722	30,163	58,886

Figure 2.1 Population Pyramid



2.2 HOUSEHOLD COMPOSITION

Information about the composition of households by sex of the household head and household size is presented in Table 2.2. The data show that 75 percent of households in Malawi are headed by men. This proportion has not changed since 1992 (75 percent) and 2000 (73 percent). Female-headed households are more common in rural areas (26 percent) than in urban areas (17 percent). The average household size in Malawi remains at 4.4 persons, the same size recorded in 2000. The household size in rural areas is slightly larger than in urban areas (4.4 compared with 4.2 persons, respectively).

Table 2.2 Household composition			
Percent distribution of households by sex of head of household and by household size, according to residence, Malawi 2004			
Characteristic	Residence		Total
	Urban	Rural	
Sex of head of household			
Male	83.5	73.7	75.3
Female	16.5	26.3	24.7
Total	100.0	100.0	100.0
Number of usual members			
0	0.6	0.2	0.3
1	12.0	7.6	8.4
2	13.1	12.3	12.4
3	16.6	17.7	17.5
4	18.2	18.7	18.6
5	13.2	15.1	14.8
6	11.1	11.4	11.4
7	6.5	8.0	7.8
8	4.0	4.3	4.3
9+	4.6	4.7	4.7
Total	100.0	100.0	100.0
Number of households	2,262	11,402	13,664
Mean size	4.2	4.4	4.4

Note: Table is based on de jure members, i.e., usual residents.

2.3 FOSTERHOOD AND ORPHANHOOD

Information on the living arrangements of children under age 18 is presented in Table 2.3. Of the 31,981 children under age 18 recorded in the 2004 MDHS, only 58 percent currently live with both their biological parents; the remainder live with either their mother only (19 percent) or their father only (3 percent), or live with neither of their natural parents (20 percent). The table also provides data on the extent of orphanhood, that is, the proportion of children who have lost one or both parents. Of children under 18 years, 12 percent have lost their father, 6 percent have lost their mother, and 4 percent have lost both of their natural parents. With the rates of adult illness and mortality related to HIV/AIDS rising in Malawi (see Chapter 12), the percentage of households with orphaned and foster children is expected to rise in the near term.

Differentials in fosterhood and orphanhood by background characteristics are not large. As expected, older children are more likely than younger children to be fostered or orphaned. A slightly larger proportion of urban children than rural children have lost one or both parents.

2.4 EDUCATIONAL LEVEL OF HOUSEHOLD POPULATION

Education is a key determinant of the lifestyle and status an individual enjoys in a society. It affects many aspects of life, including demographic and health behaviour. Studies have consistently shown that educational attainment has strong effects on reproductive behaviour, contraceptive use, fertility, infant and child mortality, morbidity, and attitudes and awareness related to family health and hygiene. In the 2004 MDHS, information on educational attainment was collected for every member of the household. Tables 2.4.1 and 2.4.2 show the percent distribution of the de facto female and male population age six and over by the highest level of education attained, according to background characteristics.

There is a strong differential in educational attainment between the sexes, especially as age increases. While 30 percent of female household members in Malawi have never been to school, the proportion among males is 20 percent. The proportion of persons with no education is high at the youngest ages, is lowest between the ages of 10 and 24, and then increases with age. For example, the proportion of women who have never attended any formal schooling increases from 14 percent from age 20-24 to 73 percent among those age 65 and over. For men, the corresponding proportion is 8 percent and 44 percent, respectively. Eight percent of women and 15 percent of men have attended some secondary school. The median number of years of schooling is 1.8 years for women and 3.1 years for men. Overall, educational attainment is higher in urban areas than in rural areas. The proportion with no education in urban areas is about one-third that in rural areas.

The proportion of the population age six and over that has attained any education varies across regions and districts. The Northern Region has the highest proportion with some education for both males (90 percent) and females (84 percent). For females, the proportion is lowest in the Southern Region (67 percent); for males, it is lowest in the Central Region (77 percent).

Of the oversampled districts, Blantyre has the highest median years of education at 5.6 years for men, while Mzimba has the highest for women (4.0). The lowest educational attainment for both men and women is observed in Mangochi, where the median years of education is 1.1 years for men and 0 years for women. The situation in Mangochi has remained the same since 2000.

Table 2.4.1 Educational attainment of household population: women

Percent distribution of the de facto female household population age six and over by highest level of education attended, according to background characteristics, Malawi 2004

Background characteristic	Education					Total	Number	Median number of years
	No education	Primary 1-4	Primary 5-8	Secondary or higher	Missing			
Age								
6-9	43.8	55.6	0.3	0.0	0.3	100.0	3,872	0.2
10-14	9.3	68.8	20.6	1.1	0.2	100.0	4,492	2.3
15-19	7.1	24.9	48.9	19.1	0.1	100.0	2,570	5.5
20-24	14.0	26.2	36.0	23.6	0.2	100.0	3,036	5.1
25-29	25.2	27.3	31.0	16.4	0.2	100.0	2,247	3.7
30-34	36.4	26.8	27.9	8.9	0.0	100.0	1,516	2.0
35-39	38.6	22.3	32.0	6.9	0.1	100.0	1,122	2.2
40-44	41.0	24.0	30.1	4.7	0.2	100.0	970	1.5
45-49	51.4	22.5	21.5	4.6	0.0	100.0	743	0.0
50-54	49.6	27.7	15.8	5.5	1.4	100.0	998	0.0
55-59	61.7	27.2	7.5	3.0	0.6	100.0	734	0.0
60-64	67.6	25.8	5.5	0.5	0.6	100.0	536	0.0
65+	73.3	23.1	2.9	0.5	0.1	100.0	1,189	0.0
Residence								
Urban	11.8	29.8	31.7	26.7	0.1	100.0	3,651	5.2
Rural	33.4	40.0	21.3	5.0	0.3	100.0	20,388	1.4
Region								
Northern	16.3	34.9	36.5	12.2	0.1	100.0	3,091	3.8
Central	31.4	39.5	20.6	8.2	0.3	100.0	10,086	1.6
Southern	32.8	38.4	21.1	7.4	0.3	100.0	10,862	1.5
District								
Blantyre	19.0	33.6	29.4	17.8	0.2	100.0	1,720	3.7
Kasungu	23.8	44.9	23.8	7.5	0.0	100.0	1,011	1.9
Machinga	42.8	37.1	15.8	3.9	0.3	100.0	892	0.6
Mangochi	49.7	32.3	13.7	4.1	0.3	100.0	1,240	0.0
Mzimba	16.6	33.1	37.6	12.6	0.2	100.0	1,550	4.0
Salima	41.7	38.1	14.7	5.4	0.1	100.0	700	0.8
Thyolo	31.9	42.9	19.9	5.2	0.1	100.0	1,234	1.5
Zomba	22.6	42.6	25.3	9.2	0.2	100.0	1,235	2.3
Lilongwe	27.9	36.9	21.8	13.1	0.3	100.0	3,599	2.2
Mulanje	31.2	42.9	20.7	5.2	0.0	100.0	1,029	1.5
Other districts	31.8	39.4	22.3	6.1	0.3	100.0	9,828	1.6
Wealth quintile								
Lowest	46.3	38.9	12.6	1.9	0.3	100.0	5,220	0.3
Second	38.4	41.1	17.9	2.2	0.3	100.0	4,681	0.9
Middle	31.0	42.1	23.7	2.8	0.4	100.0	4,661	1.5
Fourth	23.7	41.0	27.9	7.3	0.1	100.0	4,719	2.4
Highest	9.7	29.1	33.2	27.8	0.1	100.0	4,758	5.6
Total	30.1	38.4	22.9	8.3	0.2	100.0	24,039	1.8

Table 2.4.2 Educational attainment of household population: men

Percent distribution of the de facto male household population age six and over by highest level of education attended, according to background characteristics, Malawi 2004

Background characteristic	Education					Total	Number	Median number of years
	No education	Primary 1-4	Primary 5-8	Secondary or higher	Missing			
Age								
6-9	47.9	51.3	0.3	0.0	0.5	100.0	3,868	0.1
10-14	10.3	69.2	19.4	1.0	0.1	100.0	4,204	2.2
15-19	6.4	29.3	45.5	18.6	0.1	100.0	2,826	5.2
20-24	7.7	21.1	35.5	35.5	0.2	100.0	2,408	6.8
25-29	11.1	18.8	34.0	35.9	0.2	100.0	2,271	6.8
30-34	16.4	19.0	36.4	28.1	0.1	100.0	1,651	5.8
35-39	18.8	19.8	39.8	21.2	0.4	100.0	1,101	5.8
40-44	15.9	20.6	41.8	21.3	0.3	100.0	939	5.9
45-49	20.4	18.8	41.8	18.6	0.3	100.0	656	5.1
50-54	21.4	25.8	37.0	15.0	0.8	100.0	649	4.4
55-59	26.1	26.4	32.8	12.1	2.5	100.0	712	3.4
60-64	32.9	34.6	25.8	5.6	1.2	100.0	528	1.9
65+	43.7	36.4	15.6	3.0	1.4	100.0	996	0.8
Residence								
Urban	7.8	23.5	30.2	37.9	0.6	100.0	4,100	6.9
Rural	22.9	39.8	26.6	10.4	0.4	100.0	18,719	2.5
Region								
Northern	10.1	33.7	37.2	18.8	0.2	100.0	2,952	4.8
Central	22.7	36.8	25.3	14.6	0.6	100.0	9,758	2.7
Southern	20.6	37.8	26.2	15.1	0.3	100.0	10,109	2.9
District								
Blantyre	11.7	27.9	30.3	30.1	0.0	100.0	1,891	5.6
Kasungu	16.2	39.2	32.6	12.0	0.1	100.0	1,034	3.4
Machinga	28.8	38.9	22.3	9.8	0.2	100.0	808	1.9
Mangochi	36.4	38.0	16.6	8.7	0.3	100.0	1,200	1.1
Mzimba	9.4	34.8	37.2	18.5	0.1	100.0	1,471	4.7
Salima	29.8	40.7	20.9	8.1	0.5	100.0	627	1.7
Thyolo	17.6	44.1	25.9	11.8	0.4	100.0	1,103	2.7
Zomba	15.5	39.5	28.3	16.3	0.4	100.0	1,118	3.3
Lilongwe	20.4	30.2	26.3	22.2	0.9	100.0	3,634	3.8
Mulanje	16.4	44.9	27.2	11.2	0.3	100.0	847	2.7
Other districts	21.7	38.9	27.1	12.0	0.4	100.0	9,088	2.7
Wealth quintile								
Lowest	31.9	43.5	20.0	4.2	0.4	100.0	4,067	1.4
Second	27.9	41.4	24.4	6.0	0.2	100.0	4,484	2.0
Middle	21.5	39.5	30.2	8.3	0.5	100.0	4,497	2.7
Fourth	16.3	36.5	32.5	14.3	0.4	100.0	4,648	3.6
Highest	6.5	25.5	28.1	39.5	0.4	100.0	5,124	7.0
Total	20.2	36.9	27.2	15.3	0.4	100.0	22,819	3.1

Overall, there has been progress in education since 2000, as the proportion of people with no education has decreased, while the proportion with secondary or higher education has increased. In the 2000 MDHS, 6 percent of women and 12 percent of men reported attaining secondary or higher education; these proportions have increased to 8 percent and 15 percent, respectively. The median number of years of schooling for men has increased from 2.7 years in 2000 to 3.1 years in 2004. For women, the median is 1.4 years and 1.8 years, respectively. The improvement is shown by almost all subgroups of the population.

2.5 SCHOOL ATTENDANCE

The 2004 MDHS collected information that allows the calculation of net attendance ratios (NAR) and gross attendance ratios (GAR). The NAR for primary school is the percentage of the primary-school-age (6-13 years) population that is attending primary school; the NAR for secondary school is the percentage of the secondary-school-age (14-17 years) population that is attending secondary school. By definition, the NAR cannot exceed 100 percent. The GAR for primary school is the total number of primary school students of any age, expressed as the percentage of the official primary-school-age population. The GAR for secondary school is the total number of secondary school students up to an age limit of 24 years, expressed as the percentage of the official secondary-school-age population. If there are significant numbers of overage or underage students at a given level of schooling, the GAR can exceed 100 percent.

Tables 2.5.1 and 2.5.2 present the NARs and GARs by urban-rural residence, region, and wealth index, by sex, for primary school and secondary school. Findings indicate that among children within the official age range for primary school, slightly more girls (84 percent) are attending school than boys (80 percent), which is a slight improvement over the 2000 MDHS findings. The GAR shows, however, that overall, more boys are attending primary school than girls (109 compared with 103). The NAR at primary school is highest for children in the Northern Region (92 percent), followed by the Central and Southern Regions (both at 81 percent). The NAR for primary school is higher in urban areas (89 percent) than in rural areas (81 percent). Both the NAR and the GAR for primary school increase directly with wealth.

Secondary school attendance ratios are much lower and differ substantially by background characteristics. Overall, the net attendance ratio is 11.4, indicating that only 11 percent of secondary-school-age children are attending school at roughly the correct ages. The secondary NAR in urban areas is over four times higher than the NAR in rural areas. The same regional patterns exist for secondary school attendance ratios as for educational attainment: the Northern Region has the highest attendance ratios, with the Central and Southern regions being slightly lower.

The gross attendance ratio of 30 percent for secondary school, though slightly higher than in the 2000 MDHS, indicates that a substantial proportion of secondary-school students are outside the official age range for secondary schooling.

Table 2.5.1 School attendance ratios: primary school

Primary school net attendance ratios (NAR) and gross attendance ratios (GAR) for the de jure household population by level of schooling and sex, according to background characteristics, Malawi 2004

Background characteristic	Net attendance ratio ¹			Gross attendance ratio ²			Gender Parity Index ³
	Male	Female	Total	Male	Female	Total	
Residence							
Urban	89.0	89.4	89.2	112.7	104.8	108.7	0.93
Rural	78.7	83.0	80.9	108.3	102.4	105.3	0.95
Region							
Northern	91.4	93.0	92.2	129.1	117.2	123.2	0.91
Central	77.6	83.4	80.6	105.1	102.3	103.7	0.97
Southern	79.2	81.7	80.5	106.6	99.0	102.8	0.93
District							
Blantyre	83.7	89.5	86.5	110.7	110.1	110.4	0.99
Kasungu	86.2	88.6	87.5	123.5	107.3	114.9	0.87
Machinga	78.0	79.9	79.0	106.0	94.2	99.9	0.89
Mangochi	66.7	68.7	67.7	84.7	83.0	83.9	0.98
Mzimba	92.4	93.8	93.1	128.7	115.6	122.1	0.90
Salima	77.8	79.6	78.8	100.8	93.5	97.0	0.93
Thyolo	83.9	84.7	84.3	108.6	102.8	105.7	0.95
Zomba	87.8	89.8	88.8	115.3	108.6	111.9	0.94
Lilongwe	79.7	84.0	82.0	103.0	100.1	101.5	0.97
Mulanje	83.5	82.2	82.9	108.8	104.5	106.7	0.96
Other districts	77.8	82.8	80.4	109.9	103.3	106.5	0.94
Wealth quintile							
Lowest	71.8	75.0	73.5	97.1	89.3	93.1	0.92
Second	73.8	79.5	76.6	101.0	97.5	99.3	0.97
Middle	80.9	84.0	82.5	113.0	104.6	108.7	0.93
Fourth	83.1	88.2	85.7	114.6	110.8	112.6	0.97
Highest	92.2	93.8	93.0	120.5	113.2	116.8	0.94
Total	80.1	83.8	82.0	108.9	102.7	105.8	0.94

¹ The NAR for primary school is the percentage of the primary-school-age (6-13 years) population that is attending primary school. By definition the NAR cannot exceed 100 percent.

² The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.

³ The Gender Parity Index for primary school is the ratio of the primary school GAR for females to the GAR for males.

Table 2.5.2 School attendance ratios: secondary school

Secondary school net attendance ratios (NAR) and gross attendance ratios (GAR) for the de jure household population by sex, according to background characteristics, Malawi 2004

Background characteristic	Net attendance ratio ¹			Gross attendance ratio ²			Gender Parity Index ³
	Male	Female	Total	Male	Female	Total	
Residence							
Urban	30.3	32.3	31.3	71.9	64.9	68.5	0.90
Rural	6.2	8.7	7.4	25.9	17.0	21.8	0.65
Region							
Northern	10.2	16.2	13.1	39.9	28.8	34.6	0.72
Central	10.1	10.4	10.3	31.3	21.9	26.9	0.70
Southern	10.3	14.0	12.0	33.6	27.4	30.8	0.81
District							
Blantyre	15.0	24.6	19.3	46.2	48.3	47.1	1.05
Kasungu	7.1	16.8	11.4	23.2	29.8	26.1	1.29
Machinga	6.5	11.6	8.7	22.0	17.7	20.1	0.80
Mangochi	10.2	5.2	7.9	26.6	14.4	21.2	0.54
Mzimba	10.8	18.7	14.5	41.3	34.1	38.0	0.82
Salima	2.9	9.9	6.0	18.0	17.6	17.8	0.98
Thyolo	10.8	9.6	10.2	36.4	20.3	28.2	0.56
Zomba	16.1	14.7	15.5	41.8	35.4	38.9	0.85
Lilongwe	18.8	14.8	17.0	44.7	29.5	37.8	0.66
Mulanje	7.5	14.1	11.0	27.2	20.4	23.6	0.75
Other districts	6.6	9.8	8.1	29.0	20.2	24.8	0.69
Wealth quintile							
Lowest	2.6	4.0	3.2	12.4	7.0	10.0	0.57
Second	3.4	3.1	3.3	19.5	7.1	13.7	0.36
Middle	3.5	4.9	4.1	17.9	9.4	14.0	0.53
Fourth	6.8	11.5	9.1	34.6	25.4	30.1	0.74
Highest	30.6	32.9	31.7	74.8	62.7	69.0	0.84
Total	10.2	12.7	11.4	33.5	25.2	29.6	0.75

¹ NAR for secondary school is the percentage of the secondary-school-age (14-17 years) population that is attending secondary school. By definition the NAR cannot exceed 100 percent.

² The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.

³ The Gender Parity Index for secondary school is the ratio of the secondary school GAR for females to the GAR for males.

Repetition and Dropout

By asking about the grade or standard that children were attending during the previous school year, it is possible to calculate dropout rates and repetition rates for primary school. Table 2.6 indicates that repetition rates are high in Standard 1 (45 percent), which may be related to the teachers' decision to ensure a more uniform preparedness before promoting children to Standard 2. Repetition rates decline at higher standards but increase at Standard 8, due to failed attempts at getting into a secondary school. While the repetition rates at Standard 1 are about the same as those in 2000, the rates at Standard 8 have decreased from 39 to 29 percent.

Table 2.6 Grade repetition and dropout rates								
Repetition and dropout rates for the de jure household population age 5-24 years by school grade, according to background characteristics, Malawi 2004								
Background characteristic	Standard							
	1	2	3	4	5	6	7	8
REPETITION RATE								
Sex								
Male	45.3	25.4	29.5	23.3	19.8	11.8	13.3	30.8
Female	44.1	27.7	26.2	20.0	18.9	18.6	14.8	25.2
Residence								
Urban	33.5	23.4	22.7	12.2	19.0	17.0	9.8	13.3
Rural	46.1	27.2	28.7	23.6	19.4	14.4	15.1	34.6
Region								
Northern	30.3	15.3	16.1	13.4	11.5	8.3	10.0	45.7
Central	47.3	28.9	31.3	24.3	19.6	19.3	15.9	29.5
Southern	45.7	27.7	28.3	22.7	22.5	14.5	14.3	20.3
Wealth quintile								
Lowest	46.4	30.1	29.2	24.8	19.0	13.7	20.5	30.9
Second	46.3	25.6	33.4	20.8	24.7	16.4	14.4	31.9
Middle	47.5	26.7	26.4	24.5	18.9	13.0	16.3	48.1
Fourth	44.0	28.5	29.0	24.3	18.0	14.8	9.5	32.5
Highest	37.2	21.9	22.4	15.3	18.5	16.0	13.1	16.5
Total	44.7	26.6	27.8	21.7	19.4	15.0	14.0	28.6
DROPOUT RATE								
Sex								
Male	2.3	1.8	3.4	3.1	4.9	2.9	4.4	10.7
Female	1.9	2.3	2.4	3.5	5.4	4.3	8.6	8.6
Residence								
Urban	2.3	1.8	1.5	0.9	1.8	1.1	2.1	3.8
Rural	2.0	2.1	3.1	3.8	6.1	4.3	7.5	12.2
Region								
Northern	0.3	1.1	1.1	0.9	4.6	1.0	6.4	7.1
Central	1.4	2.0	3.2	3.3	5.9	5.3	8.1	10.9
Southern	3.1	2.4	3.3	4.3	4.6	3.3	4.9	10.2
Wealth quintile								
Lowest	3.5	3.7	5.5	4.2	7.0	7.3	7.9	21.4
Second	2.5	1.8	3.5	5.7	10.2	5.6	15.7	21.5
Middle	2.0	1.8	4.0	4.3	4.9	4.8	5.1	12.8
Fourth	1.4	2.8	1.9	2.2	4.7	2.6	8.4	11.1
Highest	0.3	0.3	0.8	1.3	2.7	1.3	2.1	2.1
Total	2.1	2.1	2.9	3.3	5.1	3.6	6.3	9.9
Note: The repetition rate is the percentage of students in a given grade in the previous school year who are repeating that grade in the current school year. The dropout rate is the percentage of students in a given grade in the previous school year who are not attending school in the current school year.								

The second panel of Table 2.6 shows the expected pattern of increasing dropout rates with increasing years in school. Only 2 percent of children drop out of school after attending Standard 1 compared with a dropout rate of 10 percent at Standard 8. It is notable that the dropout rate and the repetition rate at Standard 8 is higher for boys than for girls.

Rural children are more likely than urban children to drop out at all grades except Standard 1. Children in the Northern Region are less likely to stop their education than children in the Central or Southern Regions (7 percent compared with 10-11 percent at Standard 8).

2.6 CHILD LABOUR

The 2004 MDHS survey collected information on the work activities of children age 5-14 in the week prior to the survey. Working children have less opportunity to attend school and are more susceptible than adults to unfair working environments, including low or no pay, poor working conditions, and physical abuse. Despite policies and laws designed to curtail exploitative child labour, the practice continues in many settings. The 2004 MDHS asked a series of questions about whether children age 5-14 were doing any kind of work for pay, whether children regularly did unpaid family work on the farm or in a family business, and whether and to what extent (number of hours) children helped with household chores.

Table 2.7 shows that overall, 37 percent of children age 5-14 are currently engaged in some type of work. Eight percent of children age 5-14 are doing work for nonrelatives, about half of these without pay. Seven in ten children did daily household chores during the past week, most of them working for less than four hours per day. One in three children are engaged in family business or working on the family farm.

Older children are much more likely to be working than younger children. Although girls are more likely to be involved in longer hours of domestic work per day than boys, there is little difference in the overall proportions of girls and boys who work (35 and 39 percent, respectively). Urban children (17 percent) are much less likely to be working than rural children (40 percent).

Children in the Northern Region are more likely than those in the Central Region and Southern Region to be working without pay for nonrelatives (5 percent compared with 3 percent and 2 percent, respectively). Children in the Northern Region are less likely to be employed on the family farm or in the family business than children in the Southern and Central regions (29 percent compared with 33 percent and 34 percent, respectively). While 41 percent of children in the lowest quintile work, the corresponding proportion among children in the highest quintile is only 22 percent. Among the oversampled districts, almost half of children age 5-14 in Kasungu are working, compared to 30 percent in Blantyre.

Table 2.7 Child labour

Percentage of children age 5-14 years who are currently working, by type of employment and selected background characteristics, Malawi 2004

Background characteristic	Work for nonrelatives		Currently doing work on family farm or family business	Domestic work for:		Currently working ¹	Number of children
	Paid	Unpaid		Less than 4 hours per day	4 hours or more per day		
Age							
5-9	2.0	2.3	16.1	56.3	0.8	19.3	9,202
10-14	8.0	3.7	50.5	80.0	3.8	55.9	8,696
Sex							
Male	5.4	2.3	35.4	62.0	1.6	39.0	8,762
Female	4.5	3.6	30.3	73.4	2.9	35.2	9,137
Residence							
Urban	1.7	1.6	13.7	71.0	1.9	17.0	2,543
Rural	5.5	3.2	36.0	67.3	2.3	40.4	15,356
Region							
Northern	3.9	5.4	29.4	74.9	3.3	35.2	2,333
Central	4.7	3.0	33.7	65.9	2.2	37.8	7,711
Southern	5.5	2.3	32.9	67.6	2.1	36.9	7,855
District							
Blantyre	2.8	3.6	24.4	65.3	2.7	30.4	1,250
Kasungu	6.1	4.0	45.3	68.4	2.5	49.1	807
Machinga	8.4	3.5	38.9	65.1	2.8	43.1	673
Mangochi	6.4	1.5	29.9	58.1	2.2	33.9	1,014
Mzimba	4.6	6.7	39.2	73.7	3.6	44.5	1,146
Salima	5.3	2.7	33.2	68.1	1.9	36.8	541
Thyolo	6.3	3.1	33.2	70.0	2.1	37.7	917
Zomba	5.9	0.9	41.8	76.7	3.4	44.8	849
Lilongwe	2.9	1.8	30.3	65.8	2.4	33.3	2,710
Mulanje	5.9	2.3	30.6	69.2	0.9	34.3	689
Other districts	5.0	3.1	31.7	68.2	1.9	36.3	7,302
Wealth quintile							
Lowest	7.1	3.0	36.4	65.0	2.0	40.5	3,780
Second	5.8	3.1	38.8	67.6	2.2	43.0	3,544
Middle	5.5	3.3	39.1	67.4	2.2	43.6	3,464
Fourth	4.2	3.2	31.6	67.7	3.0	36.3	3,661
Highest	1.9	2.2	17.7	71.8	2.0	21.5	3,451
Total	4.9	3.0	32.8	67.8	2.3	37.1	17,899

¹Working means doing paid or unpaid work or working on a family farm or for a family business.

2.7 HOUSING CHARACTERISTICS

2004 MDHS respondents were asked about their housing environment, including access to electricity, source of drinking water, time to water source, type of toilet facilities, house construction materials, and possession of various durable goods. This information is summarised in Table 2.8. Seven percent of households in Malawi have electricity. Electricity is much more common in urban areas (30 percent) than in rural areas (2 percent).

Table 2.8 Household characteristics

Percent distribution of households by household characteristics, according to residence, Malawi 2004

Household characteristic	Residence		Total
	Urban	Rural	
Electricity			
Yes	30.2	2.2	6.9
No	69.6	97.6	93.0
Missing	0.2	0.1	0.1
Total	100.0	100.0	100.0
Source of drinking water			
Piped into dwelling	14.1	0.6	2.9
Piped into yard/plot	15.1	1.0	3.4
Public tap	45.2	7.4	13.7
Open well in yard/plot	1.9	2.5	2.4
Open public well	5.4	26.1	22.6
Protected well in yard/plot	2.0	5.5	4.9
Protected public well	14.7	43.4	38.6
Spring	0.1	3.2	2.6
River, stream	1.3	9.4	8.0
Pond, lake	0.0	0.5	0.4
Dam	0.0	0.3	0.2
Tanker truck	0.0	0.1	0.1
Total	100.0	100.0	100.0
Time to water source			
Percentage <15 minutes	67.4	36.7	41.8
Median time to source	4.9	19.4	19.0
Sanitation facility			
Flush toilet	16.2	0.8	3.4
Traditional pit toilet	76.1	80.0	79.4
VIP latrine	2.3	0.9	1.1
No facility/bush, field	5.2	18.2	16.1
Missing	0.2	0.0	0.1
Total	100.0	100.0	100.0
Flooring material			
Earth, sand	35.5	87.1	78.5
Dung	0.6	0.7	0.7
Cement	62.3	12.0	20.3
Carpet	0.9	0.1	0.2
Missing	0.2	0.0	0.1
Total	100.0	100.0	100.0
Cooking fuel			
Electricity	10.6	0.3	2.0
Kerosene	0.2	0.0	0.1
Charcoal	41.4	2.0	8.5
Firewood, straw	47.1	97.5	89.2
Dung	0.0	0.1	0.1
Total	100.0	100.0	100.0
Number of households	2,262	11,402	13,664

A household's source of drinking water is important because potentially fatal diseases including typhoid, cholera, and dysentery are prevalent in unprotected sources. Piped water, water drawn from protected wells, and deep boreholes are expected to be relatively free of these diseases. Unprotected wells and surface water (rivers, streams, ponds, and lakes), are more likely to carry disease-causing agents. Table 2.8 shows that overall, 64 percent of Malawian households have access to clean water, 20 percent from piped water and 44 percent from protected wells.

As expected, a far greater proportion of urban households have access to piped water than rural households (74 compared to 9 percent). In urban areas, 67 percent of the households have access to water within 15 minutes, compared with 37 percent of rural households.

Modern sanitation facilities are not yet available to large proportions of Malawian households. The use of traditional pit latrines is still common in both urban and rural areas, accounting for 79 percent of all households. Overall, 16 percent of the households in Malawi have no toilet facilities. This problem is more common in rural areas, where 18 percent of the households have no toilet facilities, compared with 5 percent of households in urban areas.

The type of material used for flooring is an indicator of the economic standing of the household as well as an indicator of potential exposure to disease-causing agents. Overall, 79 percent of all households in Malawi live in residences with floors made of earth, sand, or dung, while 21 percent live in houses with finished floors like those made of cement or wooden panels. Earth flooring is almost universal in rural areas (87 percent). The type of cooking fuel used by a household reflects both economic status as well as exposure to varying types of pollutants. Most households (89 percent) use firewood or straw. Charcoal is also a popular fuel in urban areas. Eleven percent of urban households use electricity as their cooking fuel, whereas almost no rural residents do.

Respondents were also asked about their household's ownership of particular durable goods. In addition to providing an indicator of economic status, ownership of these goods provides measures of other aspects of life. Ownership of a radio or television is a measure of access to mass media; ownership of a refrigerator indicates a capacity for more hygienic food storage; and ownership of a bicycle, motorcycle, or car reflects means of transport, which can be important for seeking emergency medical care or taking advantage of employment opportunities. Ownership of a telephone opens up communication with other users. Information on ownership of these items is presented in Table 2.9.

Four in ten households own a paraffin lamp. This item is slightly more common in urban households than in rural households. Nationally, 62 percent of households own a radio and only 5 percent of households own a television. Five percent of households in Malawi own a cell phone, and only 2 percent have a landline telephone.

More than one in five households own a bed with a mattress (21 percent) or table and chairs (29 percent), while ownership of a sofa set (11 percent) or a refrigerator (3 percent) is uncommon. Bicycles are the most common type of vehicle owned by households; 40 percent of households have a bicycle. Ownership of motorised transport is rare: only 2 percent of households have cars, and fewer households (1 percent) have motorcycles. As expected, urban households are more likely than rural households to own each of the items listed, with the exception of the bicycle. Overall, one in four rural households own none of the listed items, while the same is true for only one in ten urban households.

Table 2.9 Household durable goods

Percentage of households possessing various durable consumer goods, by residence, Malawi 2004

Durable consumer goods	Residence		Total
	Urban	Rural	
Household goods			
Paraffin lamp	47.1	36.5	38.2
Radio	79.2	58.5	61.9
Television	21.1	2.2	5.3
Cell phone	20.8	1.5	4.7
Landline telephone	8.3	0.5	1.8
Bed with mattress	54.5	14.7	21.3
Sofa set	35.5	5.7	10.6
Table and chairs	53.8	24.5	29.3
Refrigerator	14.7	0.7	3.0
Means of transport			
Bicycle	30.9	41.8	40.0
Motorcycle	1.9	0.8	1.0
Car/truck	8.1	0.8	2.0
None of the above	9.6	25.1	22.5
Number of households	2,262	11,402	13,664

CHARACTERISTICS OF RESPONDENTS AND WOMEN'S STATUS

3

Mylen Mahowe

This chapter provides a demographic and socioeconomic profile of the 2004 Malawi DHS sample of individual female and male respondents. It begins by describing basic background characteristics of men and women, including age at the time of the survey, marital status, educational level, and residential characteristics. It also provides detailed information on education, literacy, and exposure to mass media among men and women, data on employment and work status of women, decisionmaking in the household, and attitudes on women's position in relation to others in the household.

3.1 CHARACTERISTICS OF SURVEY RESPONDENTS

Background characteristics of women age 15-49 and men age 15-54 interviewed in the 2004 MDHS survey are presented in Table 3.1. As expected, the percentage of women and men is highest in the younger age groups and the proportion of respondents in each age group declines with age. Sixty-seven percent of women and 63 percent of men are currently married; an additional 4 percent of women and 1 percent of men reported being in an informal marriage or living together. For purposes of the 2004 MDHS survey and in presentation of findings throughout later chapters of this report, informal marriages are grouped together with formalised marriages to form the group "currently married" or "in union." One in three men had never been married, compared with only 17 percent of women, supporting the fact that men get married later in life than women. Women were more likely than men (12 and 2 percent, respectively) to be divorced, separated, or widowed.

As expected, most of the interviewed women and men reside in rural areas (82 percent of women and 80 percent of men). The largest proportion of female and male respondents live in the Southern Region (46 and 45 percent, respectively), while 41 percent of women and 42 percent of men live in the Central Region. Only 13 percent of both women and men live in the Northern Region.

Table 3.1 also shows the distribution of men and women by district, including districts that were oversampled in the survey to allow the presentation of estimates of certain indicators at the district level. Notable are the large differences between the weighted and unweighted numbers of men and women in some districts. The unweighted number represents the number of respondents who were actually interviewed in the 2004 MDHS survey, whereas the weighted number represents that district's proportional representation in the population. For instance, Salima District has only 3 percent of the population of women age 15-49 (as represented by 303 weighted cases), but 703 women were actually interviewed (or 6 percent of the total number of interviewed women).

Table 3.1 further illustrates the distribution of men and women by religion and ethnic group, showing that most of the interviewed women and men are Catholics (23 percent of women and 21 percent of men). Only 1 percent of women and 3 percent of men report having no religion. The Chewa are the largest ethnic group, making up one-third of male and female respondents; the smallest ethnic group is the Nkonde, making up only 1 percent of women and 2 percent of men.

3.2 EDUCATIONAL ATTAINMENT

Tables 3.2.1 and 3.2.2 show the percent distribution of respondents by the highest level of schooling attended according to their age, place of residence, region, and district. Young women and men are more likely to have attended school than the older generation. The distribution of respondents who have never attended school rises with increasing age. For example, 6 percent of women and 3 percent of men age 15-19 have no formal education, compared with 50 percent of women and 21 percent of men age 45-49. Similarly, 24 percent of women age 20-24 attended secondary school or higher, compared with only 5 percent of women age 45-49. For male respondents, the corresponding proportions for ages 20-24 and 45-49 are 38 percent and 15 percent, respectively.

The 2004 MDHS data indicate that educational opportunities vary among the respondents according to their areas of residence. Urban women and men are more likely to go to school than their rural counterparts. Only 8 percent of urban women and 5 percent of urban men have not attended school, compared with 27 percent and 13 percent in rural areas, respectively. The median number of years of education shows a similar differential, with urban women having a median of 6.9 years of schooling and rural women a median of 3.4 years.

Overall, respondents in the Northern Region are better educated than those in other regions. For example, while 9 percent of women in the Northern Region have no formal education, the proportion in the Central Region is 25 percent and in the Southern Region it is 27 percent. While 22 percent of women in the Northern Region have secondary or higher education, the proportions in the Central Region and Southern Region are 16 percent or lower.

Tables 3.2.1 and 3.2.2 show that wealth status has a positive relationship with a person's education. Women and men in higher wealth quintiles are better educated than those with less education. For example, the median years of schooling for women in the highest quintile is 7.6 years compared with 1.7 years for women in the lowest quintile.

Tables 3.2.1 and 3.2.2 also show the percent distribution of respondents by highest level of schooling and district. Among the oversampled districts, the proportion of women who have no formal education is lowest in Mzimba (8 percent) and highest in Mangochi (44 percent). Secondary education (or higher) is most common for men and women in Blantyre (43 percent and 28 percent, respectively). Mangochi has the lowest education for both women and men.

Table 3.2.1 Educational attainment by background characteristics: women

Percent distribution of women by highest level of schooling attended, and median number of years of schooling, according to background characteristics, Malawi, 2004

Background characteristic	Education				Total	Number of respondents	Median years of schooling
	No education	Primary 1-4	Primary 5-8	Secondary or higher			
Age							
15-19	5.5	24.2	50.0	20.2	100.0	2,392	5.6
20-24	12.7	26.9	36.5	23.9	100.0	2,870	5.2
25-29	24.3	27.0	31.8	16.9	100.0	2,157	3.9
30-34	36.6	26.5	28.3	8.5	100.0	1,478	2.1
35-39	38.3	22.8	32.5	6.4	100.0	1,117	2.2
40-44	39.4	25.8	30.2	4.6	100.0	935	1.7
45-49	50.0	23.6	21.7	4.7	100.0	749	0.0
Residence							
Urban	8.2	14.2	37.2	40.2	100.0	2,076	6.9
Rural	26.6	28.1	35.1	10.1	100.0	9,621	3.4
Region							
Northern	8.7	13.7	55.5	22.1	100.0	1,552	6.3
Central	24.6	27.3	32.3	15.8	100.0	4,734	3.8
Southern	26.5	27.6	32.6	13.3	100.0	5,412	3.5
District							
Blantyre	12.9	20.5	38.3	28.3	100.0	914	6.0
Kasungu	20.3	29.1	36.7	13.9	100.0	497	4.1
Machinga	38.6	26.8	26.2	8.3	100.0	427	2.1
Mangochi	43.6	24.6	23.7	8.0	100.0	599	1.3
Mzimba	8.2	12.5	56.7	22.6	100.0	778	6.4
Salima	34.0	30.3	24.3	11.3	100.0	303	2.4
Thyolo	28.3	32.4	30.0	9.3	100.0	618	2.8
Zomba	15.3	30.0	37.8	17.0	100.0	637	4.4
Lilongwe	21.5	23.1	31.6	23.7	100.0	1,705	4.8
Mulanje	22.2	35.7	31.7	10.4	100.0	512	3.1
Other districts	24.8	26.5	36.7	12.0	100.0	4,708	3.8
Wealth quintile							
Lowest	37.5	33.3	24.9	4.4	100.0	2,037	1.7
Second	33.4	32.4	29.6	4.6	100.0	2,277	2.4
Middle	26.6	30.4	38.0	5.1	100.0	2,383	3.3
Fourth	16.9	24.9	44.5	13.7	100.0	2,361	4.8
Highest	6.7	10.3	38.6	44.4	100.0	2,639	7.6
Total	23.4	25.6	35.5	15.5	100.0	11,698	4.1

Background characteristic	Education				Total	Number of respondents	Median years of schooling
	No education	Primary 1-4	Primary 5-8	Secondary or higher			
Age							
15-19	3.2	28.4	47.6	20.7	100.0	650	5.5
20-24	7.4	22.9	31.3	38.4	100.0	587	6.4
25-29	10.9	22.5	30.9	35.8	100.0	634	6.3
30-34	14.6	22.5	34.1	28.7	100.0	485	5.7
35-39	20.9	21.2	41.0	17.0	100.0	294	5.3
40-44	16.3	25.1	43.4	15.1	100.0	282	5.3
45-49	21.1	23.3	40.7	14.9	100.0	182	4.5
50-54	22.4	35.0	33.0	9.0	100.0	148	3.3
Residence							
Urban	5.2	12.2	31.7	50.9	100.0	669	7.3
Rural	13.4	27.6	38.9	20.0	100.0	2,593	5.1
Region							
Northern	3.1	14.2	53.1	29.6	100.0	423	6.8
Central	13.8	26.4	35.3	24.5	100.0	1,370	5.2
Southern	12.4	25.6	34.8	27.1	100.0	1,468	5.6
District							
Blantyre	5.0	10.0	41.7	43.2	100.0	316	7.3
Kasungu	10.3	21.6	49.7	18.3	100.0	156	5.3
Machinga	18.0	30.0	29.7	22.4	100.0	114	4.2
Mangochi	20.2	31.3	24.7	23.8	100.0	150	3.9
Mzimba	3.0	15.2	51.7	30.1	100.0	212	6.7
Salima	10.2	38.8	33.1	17.9	100.0	78	4.1
Thyolo	12.5	32.8	31.2	23.0	100.0	169	4.6
Zomba	14.2	25.8	33.8	26.2	100.0	159	4.9
Lilongwe	13.1	23.2	31.1	32.5	100.0	542	5.8
Mulanje	7.3	28.0	42.7	22.0	100.0	114	5.6
Other districts	13.0	26.8	38.4	21.8	100.0	1,250	5.2
Wealth quintile							
Lowest	18.6	39.2	32.3	10.0	100.0	412	3.3
Second	16.9	35.6	34.0	13.3	100.0	640	3.8
Middle	16.6	26.1	41.1	16.1	100.0	699	4.8
Fourth	7.7	23.0	48.9	20.4	100.0	709	5.9
Highest	3.5	7.9	29.3	59.3	100.0	802	7.6
Total	11.7	24.5	37.4	26.3	100.0	3,261	5.6

3.3 LITERACY

The ability to read and write is an important personal asset enabling women and men to have increased opportunities in life. In the 2004 MDHS survey, persons were defined as literate based on the UNICEF definition: persons who are able to read a complete sentence or part of a sentence. Knowing the distribution of the literate population can help programme planners design effective family planning and health messages. Tables 3.3.1 and 3.3.2 show the level of literacy for women and men by background characteristics. There has been a marked increase in the literacy rate over time, especially for women. While 49 percent of women age 15-49 were literate in 2000, this rate has increased to 62 percent in 2004. For men, the increase is less substantial: 72 percent in 2000 compared with 79 percent in 2004.

Literacy is much higher among younger women than older women. For instance, only 37 percent of women age 45-49 are literate compared with 78 percent of women age 15-19. The level of literacy is higher among men (79 percent) than women (62 percent). Urban respondents have a higher level of literacy than rural respondents (84 percent and 58 percent for women and 92 percent and 76 percent for men). As indicated in the previous section, respondents in the Northern Region have the highest level of education and thus the highest literacy rate. Literacy rates rise with increasing wealth quintile; variations are more pronounced for females than for males.

Table 3.3.1 Literacy: women									
Percent distribution of women by level of schooling attended and by level of literacy, and percent literate, according to background characteristics, Malawi 2004									
Background characteristic	Secondary school or higher	No schooling or primary school				Missing	Total	Number of women	Percent literate ¹
		Can read a whole sentence	Can read part of a sentence	Cannot read at all					
Age									
15-19	20.2	49.4	8.0	21.9	0.4	100.0	2,392	77.6	
20-24	23.9	37.9	9.2	28.8	0.1	100.0	2,870	71.1	
25-29	16.9	36.9	9.2	36.8	0.1	100.0	2,157	63.0	
30-34	8.5	33.5	7.8	50.2	0.0	100.0	1,478	49.8	
35-39	6.4	36.5	8.6	48.5	0.0	100.0	1,117	51.5	
40-44	4.6	34.0	9.8	51.4	0.2	100.0	935	48.4	
45-49	4.7	25.9	6.4	63.0	0.1	100.0	749	36.9	
Residence									
Urban	40.2	33.6	10.2	15.8	0.0	100.0	2,076	84.0	
Rural	10.1	39.3	8.3	42.1	0.2	100.0	9,621	57.7	
Region									
Northern	22.1	45.3	10.8	21.6	0.1	100.0	1,552	78.2	
Central	15.8	36.5	8.5	39.0	0.1	100.0	4,734	60.9	
Southern	13.3	37.8	8.0	40.6	0.2	100.0	5,412	59.1	
Wealth quintile									
Lowest	4.4	32.0	7.4	56.1	0.1	100.0	2,037	43.8	
Second	4.6	34.8	8.8	51.6	0.2	100.0	2,277	48.2	
Middle	5.1	41.9	10.3	42.5	0.1	100.0	2,383	57.4	
Fourth	13.7	45.6	9.5	30.9	0.2	100.0	2,361	68.9	
Highest	44.4	36.3	6.9	12.1	0.2	100.0	2,639	87.6	
Total	15.5	38.3	8.6	37.4	0.2	100.0	11,698	62.4	

¹ Refers to women who attended secondary school or higher and women who can read a whole sentence or part of a sentence.

Table 3.3.2 Literacy: men

Percent distribution of men by level of schooling attended and by level of literacy, and percent literate, according to background characteristics, Malawi 2004

Background characteristic	Secondary school or higher	No schooling or primary school				Total	Number of men	Percent literate ¹
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	Missing			
Age								
15-19	20.7	53.0	7.0	18.9	0.3	100.0	650	80.7
20-24	38.4	39.4	5.1	17.1	0.0	100.0	587	82.9
25-29	35.8	39.8	4.2	19.4	0.9	100.0	634	79.8
30-34	28.7	45.1	3.9	22.3	0.0	100.0	485	77.7
35-39	17.0	55.6	4.2	22.6	0.7	100.0	294	76.7
40-44	15.1	59.8	5.9	18.8	0.4	100.0	282	80.8
45-49	14.9	53.4	6.4	25.3	0.0	100.0	182	74.7
50-54	9.0	56.5	4.9	29.7	0.0	100.0	148	70.3
Residence								
Urban	50.9	37.1	4.1	7.3	0.7	100.0	669	92.1
Rural	20.0	50.6	5.5	23.7	0.2	100.0	2,593	76.0
Region								
Northern	29.6	46.0	8.6	15.7	0.0	100.0	423	84.3
Central	24.5	50.3	3.3	21.7	0.3	100.0	1,370	78.1
Southern	27.1	46.0	5.9	20.5	0.5	100.0	1,468	79.1
Wealth quintile								
Lowest	10.0	47.7	7.2	34.9	0.2	100.0	412	64.9
Second	13.3	52.3	4.8	29.4	0.3	100.0	640	70.3
Middle	16.1	50.7	4.9	28.2	0.1	100.0	699	71.7
Fourth	20.4	58.8	7.3	13.0	0.4	100.0	709	86.6
Highest	59.3	32.0	2.8	5.4	0.5	100.0	802	94.1
Total	26.3	47.8	5.2	20.4	0.3	100.0	3,261	79.3

¹ Refers to men who attended secondary school or higher and women who can read a whole sentence or part of a sentence.

3.4 ACCESS TO MASS MEDIA

The 2004 MDHS survey collected information on the exposure of respondents to common print and electronic media. Respondents were asked how often they read a newspaper, listen to the radio, or watch television. This information helps family planning and health programme planners reach targeted groups.

More than half of women and men listen to the radio at least once a week; the proportion who read newspapers or watch television is much smaller. Data in Tables 3.4.1 and 3.4.2 show that 67 percent of women and 85 percent of men listen to the radio at least once a week. Only 9 percent of women and 19 percent of men watch television at least once a week. Twenty-six percent of men and 13 percent of women read a newspaper at least once a week. In general, men are more likely than women to be exposed to mass media; while 12 percent of men have access to all three types of media, only 5 percent of women do. Furthermore, 13 percent of men have no access to any type of mass media compared to 31 percent of women.

Urban residents and younger respondents have more access to all three types of media than other respondents. In the Northern Region, where the literacy rate is high, women and men are more likely to read a newspaper weekly than in the Central or Southern regions. Further, exposure to

all three media is highest in the Northern Region (6 percent of women and 14 percent of men) and lowest in the Southern Region (4 percent of women and 11 percent of men).

Table 3.4.1 Exposure to mass media: women						
Percentage of women who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, Malawi 2004						
Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media	No media	Number of women
Age						
15-19	17.2	11.6	67.0	6.2	29.8	2,392
20-24	15.5	8.3	68.0	5.0	29.0	2,870
25-29	13.0	9.3	68.3	5.5	30.0	2,157
30-34	8.6	6.5	66.3	2.7	32.6	1,478
35-39	9.3	8.6	64.3	3.8	34.7	1,117
40-44	8.6	6.8	64.4	2.9	35.0	935
45-49	7.9	6.8	60.0	3.0	38.3	749
Residence						
Urban	35.5	31.3	79.3	19.7	16.8	2,076
Rural	8.0	3.9	63.7	1.4	34.6	9,621
Region						
Northern	18.9	10.3	66.0	6.1	30.7	1,552
Central	13.3	9.1	66.7	4.9	31.2	4,734
Southern	10.8	7.9	66.4	3.9	31.8	5,412
District						
Blantyre	22.7	19.8	76.0	11.8	21.2	914
Kasungu	11.5	4.9	71.2	1.7	27.3	497
Machinga	7.0	3.8	64.2	0.6	34.4	427
Mangochi	7.7	7.7	61.6	2.0	36.5	599
Mzimba	19.1	11.6	68.1	7.0	29.1	778
Salima	10.3	4.7	63.0	2.3	34.9	303
Thyolo	11.4	5.6	60.0	2.4	38.6	618
Zomba	12.9	10.4	75.9	5.3	21.9	637
Lilongwe	21.8	18.6	66.7	11.3	30.7	1,705
Mulanje	6.7	4.8	60.4	1.4	37.8	512
Other districts	9.1	4.4	65.1	2.2	33.0	4,708
Education						
No education	0.4	2.1	53.5	0.0	46.0	2,734
Primary 1-4	3.6	2.6	61.5	0.1	37.0	2,998
Primary 5-8	13.6	7.4	70.8	2.6	26.6	4,154
Secondary+	45.5	32.0	84.2	23.6	11.3	1,811
Wealth quintile						
Lowest	4.1	1.1	27.4	0.1	70.8	2,037
Second	4.8	1.5	61.9	0.3	36.4	2,277
Middle	5.4	1.3	70.7	0.2	27.8	2,383
Fourth	9.9	3.8	77.7	1.0	19.9	2,361
Highest	36.1	32.1	86.8	19.1	10.3	2,639
Total	12.9	8.7	66.5	4.6	31.4	11,698

Table 3.4.2 Exposure to mass media: men

Percentage of men who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, Malawi 2004

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media	No media	Number of men
Age						
15-19	26.5	23.8	81.5	11.6	16.2	650
20-24	32.6	23.0	85.4	15.3	12.3	587
25-29	26.0	20.4	88.2	13.5	9.8	634
30-34	28.1	22.4	87.9	14.4	10.0	485
35-39	20.8	12.9	85.7	7.6	13.5	294
40-44	21.5	11.4	83.7	6.9	14.8	282
45-49	21.2	14.1	83.4	9.0	15.3	182
50-54	13.0	3.1	81.0	0.7	18.0	148
Residence						
Urban	51.3	44.5	92.9	35.0	6.0	669
Rural	19.3	12.7	83.1	5.6	14.8	2,593
Region						
Northern	40.0	21.6	82.2	13.9	13.5	423
Central	21.9	19.8	83.4	11.6	14.9	1,370
Southern	25.6	18.0	87.5	11.1	11.1	1,468
District						
Blantyre	36.5	20.8	92.7	16.4	7.3	316
Kasungu	26.3	9.0	75.8	4.3	19.5	156
Machinga	47.9	33.0	92.9	25.9	6.6	114
Mangochi	20.2	16.8	84.8	8.2	13.5	150
Mzimba	53.6	25.3	83.3	18.9	10.4	212
Salima	16.2	6.7	88.3	4.5	11.1	78
Thyolo	20.9	8.4	93.3	6.4	6.3	169
Zomba	18.6	23.2	80.9	10.6	16.4	159
Lilongwe	30.4	34.8	87.0	22.7	12.1	542
Mulanje	28.6	13.4	83.5	6.6	14.1	114
Other districts	17.1	13.7	82.5	6.2	15.5	1,250
Education						
No education	3.6	5.2	77.5	0.0	21.2	383
Primary 1-4	7.2	8.0	78.9	1.7	19.9	798
Primary 5-8	21.5	15.7	84.8	6.6	12.4	1,220
Secondary+	59.5	41.1	94.8	33.4	3.8	859
Wealth quintile						
Lowest	9.9	4.7	57.5	1.8	39.1	412
Second	12.9	5.9	82.5	1.2	15.8	640
Middle	16.0	9.7	86.9	3.3	11.2	699
Fourth	23.2	15.7	90.0	6.0	7.6	709
Highest	55.4	48.8	95.5	37.3	3.8	802
Total	25.9	19.2	85.1	11.7	13.0	3,261

Overall, respondents have greater exposure to radio broadcasts than television or print media. Education and household wealth status are strongly associated with mass media exposure: about 24 percent of women and 33 percent of men with secondary or higher education have access to all three types of media, compared with 7 percent or less for respondents in lower education categories. While 19 percent of women in the highest wealth quintile enjoy all three media, the corresponding proportion for women in the lower quintiles is 1 percent or less.

At the district level, women in Thyolo, Mulanje, and Mangochi are the most likely not to have access to any type of media (37-39 percent), while those living Lilongwe and Blantyre are more likely to have exposure to all three types of media (11-12 percent). For men, the differences across districts are less striking; exposure to all three media ranges from 4 percent in Kasungu to 26 percent in Machinga.

3.5 EMPLOYMENT STATUS

Respondents were asked a number of questions to elicit their employment status at the time of the survey and the continuity of their employment in the 12 months prior to the survey. The measurement of women's employment is difficult because some of the activities that women do, especially work on family farms, family businesses, or in the informal sector, are often not perceived by women themselves as employment and hence are not reported as such. To avoid underestimating women's employment, the MDHS survey asked women several questions to ascertain their employment status. First women were asked, "Aside from your own housework, are you currently working?" Women who answered "no" to this question were then asked, "As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business, or work on the family farm or in the family business. Are you currently doing any of these things or any other work?" Women who answered "no" to this question were asked, "Have you done any work in the last 12 months?" Women are considered currently employed if they answered "yes" to either of the first two questions. Women who answered "yes" to the third question are not currently employed but have worked in the past 12 months. All employed women were asked their occupation; whether they were paid in cash, in kind, or not at all; and for whom they worked.

Table 3.5.1 and Table 3.5.2 show the percent distribution of female respondents and male respondents, respectively, by employment status and continuity of employment, according to background characteristics. Fifty-five percent of women reported being currently employed, 3 percent were employed in the 12 months preceding the survey but not working at the time of the survey, and 42 percent were not employed in the 12 months preceding the survey (Figure 3.1). The corresponding proportions for men are 56, 22, and 23 percent, respectively.

Employment among women and men increases with age. Women who are formerly married are more likely than other women to be employed at the time of the survey. For men, those who are currently married are most likely to be employed. One in three never-married women and men are currently employed.

While rural women are more likely than urban women to be employed, for men the pattern is reversed. Employment among women is highest in Mzimba and Thyolo (79 and 71 percent, respectively), while in Lilongwe the proportion is only 47 percent. For men, employment rates range from 82 percent in Salima to 52 percent in Thyolo.

Table 3.5.1 Employment status: women

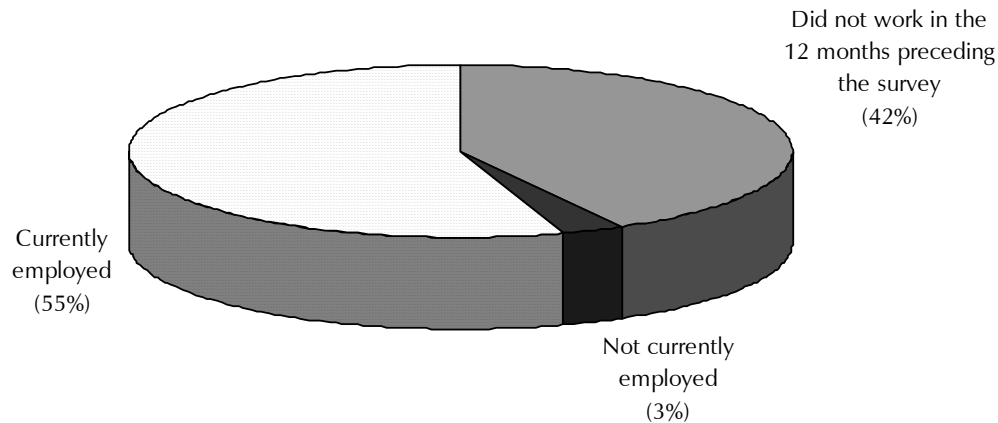
Percent distribution of women by employment status, according to background characteristics, Malawi, 2004

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of women
	Currently employed	Not currently employed				
Age						
15-19	37.1	3.0	59.9	0.0	100.0	2,392
20-24	53.3	3.8	42.9	0.0	100.0	2,870
25-29	57.6	2.9	39.5	0.0	100.0	2,157
30-34	63.6	2.9	33.5	0.0	100.0	1,478
35-39	64.3	2.1	33.6	0.0	100.0	1,117
40-44	67.5	4.2	28.3	0.0	100.0	935
45-49	67.8	2.8	29.3	0.1	100.0	749
Marital status						
Never married	32.5	2.4	65.1	0.0	100.0	1,970
Married or living together	58.4	3.3	38.3	0.0	100.0	8,312
Divorced/separated/widowed	68.0	3.2	28.8	0.0	100.0	1,416
Number of living children						
0	38.9	2.9	58.1	0.0	100.0	2,655
1-2	56.2	3.6	40.2	0.0	100.0	4,092
3-4	60.9	2.7	36.4	0.0	100.0	2,726
5+	65.8	3.1	31.1	0.1	100.0	2,225
Residence						
Urban	44.2	1.9	53.9	0.0	100.0	2,076
Rural	57.6	3.4	39.0	0.0	100.0	9,621
Region						
Northern	62.2	2.3	35.5	0.0	100.0	1,552
Central	48.8	3.5	47.7	0.0	100.0	4,734
Southern	58.8	3.0	38.2	0.0	100.0	5,412
District						
Blantyre	49.3	2.4	48.4	0.0	100.0	914
Kasungu	47.5	8.0	44.4	0.1	100.0	497
Machinga	54.1	3.8	42.1	0.0	100.0	427
Mangochi	55.3	2.4	42.4	0.0	100.0	599
Mzimba	78.7	3.3	18.0	0.0	100.0	778
Salima	52.4	1.8	45.7	0.1	100.0	303
Thyolo	70.5	2.8	26.7	0.0	100.0	618
Zomba	52.5	0.5	46.9	0.1	100.0	637
Lilongwe	46.6	2.3	51.1	0.0	100.0	1,705
Mulanje	62.0	2.5	35.4	0.0	100.0	512
Other districts	54.3	3.7	42.1	0.0	100.0	4,708
Education						
No education	63.1	3.0	33.9	0.0	100.0	2,734
Primary 1-4	58.2	3.7	38.1	0.0	100.0	2,998
Primary 5-8	52.5	3.1	44.4	0.0	100.0	4,154
Secondary+	44.4	2.5	53.1	0.0	100.0	1,811
Wealth quintile						
Lowest	63.9	3.0	33.1	0.0	100.0	2,037
Second	58.3	3.9	37.8	0.0	100.0	2,277
Middle	56.5	3.6	39.9	0.0	100.0	2,383
Fourth	54.6	3.4	41.9	0.0	100.0	2,361
Highest	45.2	2.0	52.8	0.0	100.0	2,639
Total	55.2	3.1	41.6	0.0	100.0	11,698

Table 3.5.2 Employment status: men
Percent distribution of men by employment status, according to background characteristics, Malawi 2004

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of men
	Currently employed	Not currently employed				
Age						
15-19	19.6	15.7	64.3	0.5	100.0	650
20-24	52.4	18.5	28.7	0.3	100.0	587
25-29	63.3	28.1	8.6	0.0	100.0	634
30-34	72.4	21.5	6.0	0.0	100.0	485
35-39	71.0	22.6	6.4	0.0	100.0	294
40-44	71.4	22.5	6.1	0.0	100.0	282
45-49	63.3	27.8	8.9	0.0	100.0	182
50-54	69.1	24.1	6.8	0.0	100.0	148
Marital status						
Never married	31.0	15.1	53.5	0.5	100.0	1,084
Married or living together	68.2	25.3	6.5	0.0	100.0	2,079
Divorced/separated/widowed	62.5	19.8	17.7	0.0	100.0	98
Number of living children						
0	34.2	17.7	47.7	0.4	100.0	1,253
1-2	70.8	22.6	6.6	0.0	100.0	794
3-4	68.0	25.4	6.6	0.0	100.0	588
5+	67.8	25.2	7.0	0.0	100.0	625
Residence						
Urban	64.9	7.1	28.0	0.0	100.0	669
Rural	53.2	25.5	21.1	0.2	100.0	2,593
Region						
Northern	55.4	21.1	23.0	0.5	100.0	423
Central	51.6	30.5	17.8	0.1	100.0	1,370
Southern	59.5	13.7	26.7	0.1	100.0	1,468
District						
Blantyre	61.8	11.4	26.7	0.0	100.0	316
Kasungu	53.2	26.5	20.3	0.0	100.0	156
Machinga	53.7	8.7	37.6	0.0	100.0	114
Mangochi	69.6	17.4	13.0	0.0	100.0	150
Mzimba	60.4	16.2	23.4	0.0	100.0	212
Salima	81.7	8.4	9.9	0.0	100.0	78
Thyolo	51.5	26.0	22.5	0.0	100.0	169
Zomba	61.4	17.0	21.6	0.0	100.0	159
Lilongwe	53.8	26.3	20.0	0.0	100.0	542
Mulanje	62.3	13.8	23.9	0.0	100.0	114
Other districts	50.5	26.0	23.1	0.4	100.0	1,250
Education						
No education	62.2	29.5	8.4	0.0	100.0	383
Primary 1-4	60.4	23.1	16.5	0.0	100.0	798
Primary 5-8	53.6	23.1	23.1	0.2	100.0	1,220
Secondary+	51.2	15.2	33.3	0.2	100.0	859
Wealth quintile						
Lowest	52.1	27.7	19.8	0.5	100.0	412
Second	54.7	24.5	20.8	0.0	100.0	640
Middle	51.0	31.1	17.6	0.3	100.0	699
Fourth	59.0	20.0	20.9	0.1	100.0	709
Highest	59.3	9.8	30.9	0.0	100.0	802
Total	55.6	21.7	22.5	0.2	100.0	3,261

Figure 3.1 Employment Status of Women Age 15-49



MDHS 2004

3.6 WOMEN'S OCCUPATION

Table 3.6.1 shows the percent distribution of employed women in the 12 months preceding the survey by occupation, according to background characteristics. Information on a woman's occupation not only allows an evaluation of the woman's source of income but also has implications for her empowerment. It is expected that occupation and earnings are more likely to empower women if they perceive their earnings as important for meeting the needs of their household.

Seven in ten women work in agriculture. Only 3 percent of employed women are in professional, technical, or managerial positions, and 21 percent are employed in sales and services. There are small variations across subgroups of women. However, urban women, women with secondary or higher education, and women living in households in the highest wealth quintile are more likely to hold professional, technical, or managerial jobs.

Table 3.6.2 shows that among employed men, 57 percent work in agriculture, 17 percent in sales and services, and 14 percent work as skilled manual laborers. Men show similar variations across subgroups as women.

Table 3.6.1 Occupation: women

Percent distribution of women employed in the 12 months preceding the survey by occupation, according to background characteristics, Malawi 2004

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agricul- ture	Total	Number of women
Age									
15-19	0.2	0.1	15.3	1.8	1.1	3.4	77.8	100.0	958
20-24	1.3	1.8	18.5	2.1	1.2	1.4	73.7	100.0	1,638
25-29	4.3	2.0	22.2	2.1	1.4	1.5	66.4	100.0	1,306
30-34	4.2	1.4	22.2	2.1	1.2	1.3	67.6	100.0	982
35-39	4.7	0.7	24.2	2.7	2.4	0.6	64.7	100.0	741
40-44	2.9	0.5	24.7	4.0	1.1	1.4	65.3	100.0	670
45-49	1.7	0.7	17.8	2.4	0.9	1.1	75.4	100.0	529
Marital status									
Never married	3.1	5.3	20.5	3.3	2.2	6.5	59.0	100.0	688
Married or living together	2.5	0.7	18.6	2.3	1.0	0.6	74.3	100.0	5,128
Divorced/separated/widowed	3.7	0.9	29.9	1.9	2.3	3.4	57.9	100.0	1,008
Number of living children									
0	2.3	3.2	18.3	2.5	1.6	4.2	67.7	100.0	1,112
1-2	3.2	1.4	21.1	2.0	1.3	1.2	69.9	100.0	2,446
3-4	3.4	0.4	20.8	2.1	1.0	0.9	71.4	100.0	1,735
5+	1.6	0.4	20.7	3.0	1.5	1.0	71.9	100.0	1,531
Residence									
Urban	8.2	5.7	45.9	4.7	1.9	8.1	25.5	100.0	957
Rural	1.8	0.5	16.3	2.0	1.2	0.5	77.7	100.0	5,867
Region									
Northern	3.5	0.5	28.4	3.1	1.1	1.5	61.9	100.0	1,001
Central	2.5	1.8	19.7	2.7	1.6	1.7	70.0	100.0	2,477
Southern	2.6	1.0	18.7	1.8	1.2	1.5	73.1	100.0	3,346
District									
Blantyre	6.5	4.2	35.0	4.3	1.0	4.1	44.8	100.0	472
Kasungu	2.2	0.8	12.7	2.3	2.9	0.8	78.2	100.0	276
Machinga	3.3	0.0	9.1	1.6	1.5	1.0	83.4	100.0	248
Mangochi	2.0	1.4	18.7	1.0	1.4	1.0	74.6	100.0	345
Mzimba	3.0	0.6	13.7	1.6	1.0	1.9	78.2	100.0	638
Salima	2.9	1.7	17.9	3.4	3.8	0.7	69.6	100.0	164
Thyolo	1.7	0.0	15.6	2.7	1.8	0.8	77.5	100.0	453
Zomba	4.0	0.9	17.7	2.2	0.2	3.2	71.8	100.0	337
Lilongwe	2.1	3.7	22.4	2.9	1.0	4.1	63.5	100.0	834
Mulanje	2.3	0.3	17.0	1.2	1.9	1.7	75.6	100.0	330
Other districts	2.3	0.5	22.7	2.3	1.2	0.5	70.5	100.0	2,727
Education									
No education	0.2	0.0	13.0	2.1	1.4	0.5	82.8	100.0	1,808
Primary 1-4	0.5	0.0	17.3	2.1	1.3	1.3	77.5	100.0	1,855
Primary 5-8	1.1	0.3	25.2	2.2	1.3	2.2	67.6	100.0	2,310
Secondary+	17.4	8.9	30.2	3.6	1.4	2.7	35.7	100.0	849
Wealth quintile									
Lowest	0.6	0.1	11.2	1.8	1.7	0.4	84.2	100.0	1,363
Second	0.4	0.0	15.6	1.6	1.4	0.6	80.5	100.0	1,415
Middle	0.4	0.1	17.3	2.2	1.4	0.3	78.1	100.0	1,432
Fourth	1.6	0.7	22.2	2.1	0.9	0.8	71.8	100.0	1,370
Highest	11.6	5.7	37.9	4.2	1.3	6.3	33.1	100.0	1,244
Total	2.7	1.2	20.5	2.3	1.3	1.6	70.3	100.0	6,824

Note: Total includes 2 women with missing information on occupation.

Table 3.6.2 Occupation: men

Percent distribution of men employed in the 12 months preceding the survey by occupation, according to background characteristics, Malawi 2004

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agricul- ture	Total	Number of men
Age									
15-19	0.8	0.2	16.8	7.6	7.3	4.7	62.5	100.0	229
20-24	2.8	2.5	13.7	15.3	6.5	4.3	54.8	100.0	416
25-29	6.1	1.2	19.8	13.1	3.3	1.4	55.1	100.0	579
30-34	8.3	1.8	21.4	16.4	2.4	1.1	48.7	100.0	456
35-39	5.2	3.7	16.0	15.3	4.1	2.0	53.8	100.0	275
40-44	5.4	2.0	14.3	12.9	2.1	0.8	62.6	100.0	265
45-49	2.5	1.2	15.5	13.1	3.8	1.2	62.7	100.0	165
50-54	4.0	0.5	4.9	8.3	1.0	0.8	80.6	100.0	138
Marital status									
Never married	4.5	2.7	17.6	10.6	7.3	5.7	51.5	100.0	500
Married or living together	4.9	1.6	16.5	14.2	3.2	1.1	58.5	100.0	1,943
Divorced/separated/widowed	7.9	0.0	15.7	16.7	0.6	2.4	56.7	100.0	81
Number of living children									
0	4.1	2.1	16.8	11.3	6.3	4.1	55.3	100.0	651
1-2	6.6	1.5	18.1	15.0	3.5	2.2	53.1	100.0	742
3-4	5.8	2.0	15.7	15.0	3.0	0.8	57.7	100.0	550
5+	3.0	1.4	15.8	12.8	2.5	0.9	63.6	100.0	581
Residence									
Urban	11.5	5.2	39.7	21.9	4.3	7.1	10.2	100.0	482
Rural	3.4	0.9	11.3	11.6	3.8	0.9	68.2	100.0	2,042
Region									
Northern	5.1	1.4	9.4	11.3	2.8	1.9	68.2	100.0	324
Central	3.9	1.8	14.3	9.1	3.4	1.9	65.7	100.0	1,126
Southern	6.0	1.8	21.5	18.9	4.8	2.3	44.7	100.0	1,074
District									
Blantyre	9.5	2.5	34.1	26.1	4.8	3.6	19.4	100.0	232
Kasungu	3.6	0.0	5.2	5.5	8.6	0.0	77.2	100.0	124
Machinga	6.8	2.0	20.2	14.3	2.2	0.7	53.9	100.0	71
Mangochi	3.2	0.0	17.6	12.5	1.4	0.0	65.3	100.0	131
Mzimba	4.6	1.5	5.9	8.3	2.2	2.0	75.4	100.0	163
Salima	2.6	1.0	18.2	9.2	4.9	1.6	62.6	100.0	71
Thyolo	3.7	2.0	17.8	20.6	12.7	1.0	42.2	100.0	131
Zomba	7.0	1.6	22.2	18.4	1.9	3.2	45.7	100.0	125
Lilongwe	5.3	2.5	22.1	8.7	2.6	4.7	54.1	100.0	434
Mulanje	8.2	2.5	17.3	22.3	5.7	1.9	42.2	100.0	87
Other Districts	3.8	1.7	12.0	12.7	3.2	1.2	65.4	100.0	956
Education									
No education	0.3	0.2	10.5	8.8	4.8	1.7	73.8	100.0	351
Primary 1-4	0.8	0.1	10.6	12.2	4.5	2.6	69.1	100.0	666
Primary 5-8	1.4	1.4	18.2	15.2	3.6	2.1	58.1	100.0	935
Secondary+	18.3	5.1	25.3	15.3	3.2	1.6	31.1	100.0	571
Wealth quintile									
Lowest	1.4	0.7	5.4	8.9	2.2	1.6	79.8	100.0	328
Second	0.8	0.4	6.8	14.0	4.3	0.4	73.3	100.0	507
Middle	1.9	1.0	11.7	11.5	3.9	0.8	69.3	100.0	575
Fourth	3.0	0.9	18.0	14.3	4.1	0.5	59.1	100.0	560
Highest	15.9	5.3	36.5	17.1	4.4	6.8	14.0	100.0	554
Total	4.9	1.7	16.7	13.5	3.9	2.1	57.1	100.0	2,523

3.7 TYPE OF EMPLOYMENT

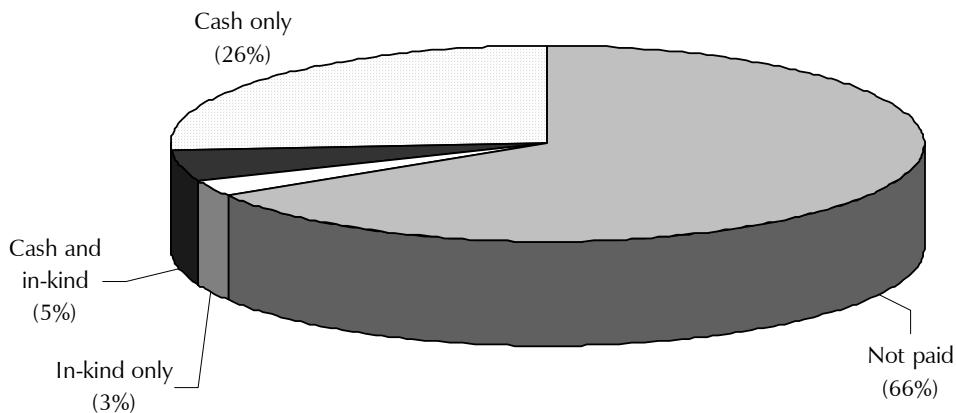
Table 3.7.1 shows the percent distribution of women who have worked at any time during the 12 months preceding the survey by type of employment (agricultural or nonagricultural). All employed women were asked whether they were paid in cash, in kind, or not at all. Two in three women receive no payment for their work (Figure 3.2). Women who work in agricultural jobs are much more likely not to be paid than women who work in nonagricultural jobs (80 percent compared with 32 percent). Ten percent of women engaged in agricultural work were paid in cash only, compared with 63 percent of women in nonagricultural jobs.

Overall, three in four women who were employed in the 12 months prior to the survey were self-employed. Small differences are found between agriculture and nonagriculture occupations. Two in three women work seasonally. Women in agricultural jobs are more likely to work seasonally (82 percent) than women in nonagricultural jobs (29 percent). Fifteen percent of women who work in agriculture work all year, compared with 53 percent of women in nonagricultural jobs.

Table 3.7.1 Type of employment: women			
Percent distribution of women employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Malawi 2004			
Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	10.2	62.6	25.7
Cash and in-kind	6.2	3.6	5.4
In-kind only	3.6	1.4	2.9
Not paid	80.0	32.2	65.8
Missing	0.0	0.3	0.1
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	17.5	7.1	14.4
Employed by nonfamily member	3.7	23.5	9.6
Self-employed	78.7	69.2	75.9
Missing	0.1	0.3	0.1
Total	100.0	100.0	100.0
Continuity of employment			
All year	15.2	52.6	26.3
Seasonal	81.9	28.5	66.0
Occasional	2.6	18.8	7.4
Missing	0.4	0.2	0.3
Total	100.0	100.0	100.0
Number of women	4,800	2,022	6,824

Total includes two women with missing information on type of employment.

Figure 3.2 Type of Earnings of Women Age 15-49



MDHS 2004

Table 3.7.2 shows the percent distribution of men who were employed in the 12 months preceding the survey by occupation and type of earnings. One in three men are not paid for their work and 54 percent receive cash payment only. Men who work in agriculture are less likely to be paid than men who work in nonagricultural jobs. Among those who are paid for their work, the largest proportion are paid in cash (32 percent), while 10 percent are paid in cash and in-kind and 6 percent are paid in in-kind only.

Type of earnings	Agricultural work	Nonagricultural work	Total
Cash only	32.4	82.3	53.8
Cash and in-kind	10.4	3.4	7.4
In-kind only	6.1	1.0	3.9
Not paid	49.8	10.1	32.8
Missing	1.3	3.2	2.2
Total	100.0	100.0	100.0
Number of men	1,441	1,083	2,523

3.8 MEASURES OF WOMEN'S EMPOWERMENT

In addition to information on women's education, employment status, and control of earnings, the 2004 MDHS also obtained information on other measures of women's status and empowerment. In particular, questions were asked on women's participation in specific household decisions, on their degree of acceptance of wife beating, and on their opinions about when a wife should be able to refuse sex with her husband. These data provide insight into women's control over their lives and their environment and their attitudes toward traditional gender roles, which are

important aspects of women's empowerment relevant for understanding demographic and health behaviours.

These questions are used to define three indicators of women's empowerment: women's participation in decision making, women's degree of acceptance of wife beating, and their degree of acceptance of a wife's right to refuse sex with her husband. The first measure requires little explanation, since the ability to make decisions about one's own life is of obvious importance to practical empowerment. The other two measures derive from the notion that gender equity is essential to empowerment. Responses that indicate a view that the beating of wives by husbands is justified reflect a sanction of women's lower status, both absolutely and relative to men. Although such attitudes do not necessarily signify approval of men beating their wives, they do signify women's acceptance of norms that give men the right to discipline women with force. Similarly, beliefs about whether and when a woman can refuse sex with her husband reflect issues of gender equity regarding sexual rights and bodily integrity. Besides yielding an important measure of empowerment, the information about women's attitudes toward sexual rights will be useful for improving and monitoring reproductive health programmes that depend on women's willingness and ability to control their own sexual lives.

Employed women who earn cash for their work were asked who the main decisionmaker is with regard to the use of their earnings. This information allows the assessment of women's control over their own earnings. In addition, they were asked about the proportion of household expenditures met by their earnings, in order to assess the relative importance of women's earnings. This information not only allows an evaluation of the relative importance of women's earnings in the household economy, but has implications for the empowerment of women. It is expected that employment and earnings are more likely to empower women if women perceive their earnings to be important for meeting the needs of their households.

Table 3.8 shows how respondents' degree of control over the use of their earnings and the extent to which earnings of women meet household expenditures varies by background characteristics. The data show that more than half (52 percent) of women decide for themselves on how their earnings are used, 20 percent make the decisions jointly with someone else, and 27 percent reported that someone else decides for them. Respondents' degree of control over the use of their earnings varies by background characteristics. Older women, more educated women, and women who live in households in the higher wealth quintiles are more likely to have control over their earnings. For example, while 64 percent of women with secondary or higher education decide how their earnings are used, the proportion among women with no education is only 48 percent.

Table 3.8 also shows the proportion of household expenditures that are met by the women's cash earnings. More than half (57 percent) of women reported that their earnings support half or more of their household's expenditures. Twenty percent of women say their earnings support all of their households' expenditures, and 37 percent reported that their earnings support half or more of their households' financial needs. Across subgroups of women, the data show that women who are more likely to meet all of their household's expenditures are those over age 30, those who are widowed, separated, or divorced; rural women; and those who are less educated.

Table 3.9 shows working women's control over their own earnings within marital and non-marital contexts, and how it varies by the extent to which their earnings help to meet household expenditures. Overall, 38 percent of married women have complete control over their earnings, 27 percent share control with their husband or partner, and for 34 percent of married women, their husband/partner controls their earnings. Many married women do not have control over their cash income even if their earnings do not contribute to the household expenditures. For example, husbands decide how their wives' earnings are used for 43 percent of women whose income does not substantially contribute to household expenditures. Women who are divorced, separated, widowed, or never married are more likely to have control over their earnings than married women (86 percent compared with 38 percent).

Table 3.9 Women's control over earnings

Percent distribution of women who received cash earnings for work in the past 12 months by person who decides how earnings are used and current marital status, according to the proportion of household expenditures met by earnings, Malawi 2004

Contribution to household expenditures	Currently married or living together							Not married ¹						
	Self only	Jointly with husband	Jointly with someone else	Husband only	Someone else only	Missing	Total	Number of women	Self only	Jointly with someone else	Someone else only	Missing	Total	Number of women
Almost none/none	40.8	10.9	3.9	42.9	1.5	0.0	100.0	132	84.6	1.8	13.6	0.0	100.0	87
Less than half	40.2	22.7	1.1	34.8	0.4	0.9	100.0	521	82.3	2.9	14.7	0.0	100.0	176
Half or more	34.5	32.9	0.4	31.9	0.3	0.0	100.0	578	83.6	2.7	13.7	0.0	100.0	198
All	37.7	31.6	0.5	30.0	0.0	0.3	100.0	231	92.0	0.6	7.1	0.3	100.0	195
Total	37.5	27.0	1.0	33.5	0.6	0.5	100.0	1,468	85.6	2.0	12.0	0.4	100.0	657

Note: Total includes women with missing information on contribution to household expenditures.

¹Never married, divorced, separated or widowed women

The ability of women to take decisions that affect the circumstances of their own lives is an essential aspect of empowerment. In order to assess women's decisionmaking autonomy, information was collected on women's participation in five different types of decisions: on the respondent's own health care, on making large household purchases, on making household purchases for daily needs, on visits to family friends or relatives, and on what food should be cooked each day. Table 3.10 shows the percent distribution of women according to who in the household usually has the final say on each of these decisions. The data show that for 65 percent or more of married women, their husbands make decisions for their wives' health care, and large and daily household purchases. Decisions to visit family or relatives are more likely to be made together with their husbands (41 percent). The only one of these decisions that a majority of married women make on their own is the type of food to cook daily.

The pattern is different for nonmarried women. Nonmarried women are more likely than married women to make four of the five decisions by themselves. However, for about half of women all five of these decisions are made by someone other than the woman herself: someone else decides on visiting family and relatives for 47 percent of nonmarried women and on large household purchases for 56 percent of nonmarried women.

Table 3.10 Women's participation in decisionmaking

Percent distribution of women by person who has the final say in making specific decisions and current marital status, according to type of decision, Malawi 2004

Decision	Currently married or living together						Total	Number of women	Not married ¹				Total	Number of women
	Self only	Jointly with husband	Jointly with someone else	Husband only	Some-one else only	Decision not made/not applicable			Self only	Jointly with someone else	Some-one else only	Decision not made/not applicable		
Own health care	17.8	9.9	0.1	70.4	1.5	0.3	100.0	8,312	40.7	3.0	51.9	4.4	100.0	3,385
Large household purchases	6.4	11.5	0.1	80.3	1.2	0.5	100.0	8,312	34.2	3.4	55.7	6.7	100.0	3,385
Daily household purchases	18.8	13.8	0.1	65.4	1.5	0.2	100.0	8,312	35.4	3.8	54.8	5.9	100.0	3,385
Visits to family or relatives	18.8	41.3	0.2	38.4	1.1	0.2	100.0	8,312	40.9	6.8	46.5	5.7	100.0	3,385
What food to cook each day	64.3	9.5	0.4	24.2	1.3	0.1	100.0	8,312	38.6	5.9	49.5	5.9	100.0	3,385

¹Never married, divorced, separated or widowed women

Table 3.11.1 shows the percentage of women who report that they alone or jointly have the final say in specific household decisions, according to background characteristics. Divorced, separated, or widowed women are far more likely than married or never-married women to have the final say in all the specified decisions. Degree of independence in making household decisions increases with age and number of children. Urban women, women who earn cash, and the least educated women are more likely to have a final say in all given decisions. Regardless of background characteristic, ever-married women and those over age 20 have the final say on what food to cook every day.

Table 3.11.2 shows similar data from a man's perspective. Contrary to the women's report, the majority of men say that in a couple, a wife has an equal or greater say in making decisions on visiting family or friends, control over the money she earns, and how many children she wants to have and when she wants to have them (73 percent, 69 percent, and 64 percent, respectively). Men are less likely to agree on a wife's role in making decisions on large household purchases and small daily purchases (44 percent and 53 percent, respectively). Twenty-seven percent of men say that a wife has an equal or greater say in all five decisions listed. There are no significant differences by the man's age, except that men age 15-19 are less likely than older men to agree that a wife has an equal or greater share in making specific decisions. Rural men are much less likely than urban men to agree to the five decisions (23 percent compared with 44 percent). Men in the Northern Region are less likely than men in other regions to agree to the specific decisions (21 percent compared with 27-28 percent). Education and wealth index have a positive relationship with the likelihood that men agree to the role of women in making specific decisions. Better educated men and men in higher wealth quintile are more likely than other men to say that a wife has an equal or greater say in all five decisions. Across oversampled districts, men in Blantyre and Machinga are most likely to say that a wife has an equal or greater say in making specific decisions. On the other hand, men in Salima are the least likely to agree to these decisions.

Table 3.11.1 Women's participation in decisionmaking by background characteristics: women

Percentage of women who say that they alone or jointly have the final say in specific decisions, by background characteristics, Malawi 2004

Background characteristic	Alone or jointly have final say in:							Number of women
	Own health care	Making large purchases	Making daily purchases	Visits to family or relatives	What food to cook each day	All specified decisions	None of the specified decisions	
Age								
15-19	17.8	8.7	13.1	30.3	31.2	6.3	56.4	2,392
20-24	28.2	18.0	30.5	55.5	65.7	13.3	23.6	2,870
25-29	33.8	25.0	39.0	62.2	74.2	19.9	17.9	2,157
30-34	38.5	30.6	43.7	68.1	78.0	24.7	13.6	1,478
35-39	42.4	34.8	44.8	65.3	78.4	27.9	13.6	1,117
40-44	43.4	35.5	49.4	70.9	83.6	28.9	10.8	935
45-49	50.0	43.9	54.7	76.1	85.0	37.8	10.5	749
Marital status								
Never married	17.1	9.3	10.2	20.6	16.3	7.9	71.3	1,970
Married or living together	27.8	18.0	32.8	60.3	74.3	12.1	16.7	8,312
Divorced/separated/widowed	80.6	76.9	79.5	85.6	83.8	73.2	10.7	1,416
Number of living children								
0	19.7	10.9	15.6	30.7	31.3	8.4	56.5	2,655
1-2	33.4	24.8	36.6	61.6	71.8	19.6	18.4	4,092
3-4	37.0	28.9	42.0	65.3	78.0	22.9	14.6	2,726
5+	40.1	30.4	44.5	67.9	80.4	24.6	13.3	2,225
Residence								
Urban	34.1	28.2	42.9	53.2	61.2	23.6	31.1	2,076
Rural	32.0	22.7	32.8	57.4	66.6	17.7	23.9	9,621
Region								
Northern	37.1	25.6	36.6	53.0	70.9	16.2	22.2	1,552
Central	29.3	21.1	32.3	53.4	65.2	16.9	26.5	4,734
Southern	33.7	25.3	36.1	60.5	64.6	21.1	24.8	5,412
District								
Blantyre	44.3	37.5	48.3	59.7	69.5	31.6	24.9	914
Kasungu	19.3	12.4	20.1	36.9	69.9	8.0	24.7	497
Machinga	27.8	22.5	35.5	57.5	69.7	19.0	26.0	427
Mangochi	26.7	22.8	31.7	43.6	50.9	17.8	39.4	599
Mzimba	41.5	23.6	35.7	57.9	77.7	15.0	15.4	778
Salima	27.8	19.2	31.6	53.4	63.1	15.3	29.8	303
Thyolo	30.3	22.5	33.2	78.8	74.2	19.0	14.1	618
Zomba	26.7	20.6	30.6	57.0	61.7	17.6	27.2	637
Lilongwe	30.7	23.4	36.5	52.8	61.3	19.6	29.4	1,705
Mulanje	29.9	24.5	33.8	61.2	61.4	21.6	29.2	512
Other districts	33.3	23.2	34.0	57.7	65.6	17.9	23.9	4,708
Education								
No education	36.3	27.9	38.3	63.2	71.8	22.5	18.7	2,734
Primary 1-4	30.3	21.3	32.0	57.8	68.1	17.7	22.8	2,998
Primary 5-8	31.3	21.7	34.3	54.8	64.4	16.6	26.5	4,154
Secondary+	32.3	25.5	34.2	49.2	55.1	19.8	35.8	1,811
Employment								
Not employed	25.0	17.2	27.7	46.2	56.3	13.4	35.2	5,235
Employed for cash	44.6	39.6	53.1	68.4	77.7	31.8	15.6	2,033
Employed not for cash	35.5	23.8	34.2	63.6	71.2	19.0	17.7	4,417
Wealth quintile								
Lowest	42.0	33.5	42.7	63.4	71.4	28.6	19.8	2,037
Second	30.4	20.9	30.4	58.5	67.2	17.0	23.0	2,277
Middle	28.8	19.8	30.4	54.7	65.4	15.0	24.9	2,383
Fourth	28.5	19.5	31.3	56.4	65.4	13.9	25.0	2,361
Highest	33.4	25.6	38.9	51.9	60.5	20.5	31.6	2,639
Total	32.4	23.6	34.6	56.7	65.7	18.8	25.2	11,698

Note: Total includes 13 women with missing information on employment status

Table 3.11.2 Men's attitudes towards women's control of decisionmaking by background characteristics

Percentage of men who say that in a couple the wife should have an equal or greater say than the husband in specific decisions, by background characteristics, Malawi 2004

Background characteristic	Wife should have an equal or greater say in:						Number of men
	Making large purchases	Making daily purchases	Visits to family or relatives	Control over money she earns	How many children to have and when	All of the specified decisions	
Age							
15-19	35.7	46.9	71.7	66.6	58.4	19.5	650
20-24	41.0	51.6	70.9	66.5	63.6	25.1	587
25-29	49.2	55.2	76.1	71.0	69.4	32.6	634
30-34	47.8	57.1	75.4	71.9	68.2	29.3	485
35-39	49.7	56.5	72.6	66.1	61.2	27.8	294
40-44	45.6	53.3	74.3	68.4	61.9	27.6	282
45-49	43.3	51.9	70.1	73.6	64.9	27.7	182
50-54	45.6	52.9	65.2	60.6	54.0	27.7	148
Marital status							
Never married	41.2	52.6	74.9	69.5	63.4	25.3	1,084
Married or living together	45.7	52.9	71.8	67.7	64.2	27.6	2,079
Divorced/separated/widowed	40.0	55.0	74.4	72.0	54.9	26.5	98
Number of living children							
0	40.7	51.7	73.3	69.0	63.4	24.5	1,253
1-2	46.1	53.0	72.6	68.6	65.6	28.7	794
3-4	48.8	53.9	75.1	70.3	64.4	30.1	588
5+	43.9	54.1	70.3	65.3	60.7	25.8	625
Residence							
Urban	55.0	68.5	83.8	79.8	79.1	43.6	669
Rural	41.3	48.8	70.1	65.5	59.6	22.5	2,593
Region							
Northern	35.2	74.8	58.3	70.9	52.0	21.2	423
Central	45.0	45.4	71.2	64.3	62.0	26.8	1,370
Southern	45.8	53.5	78.6	71.6	68.6	28.4	1,468
Education							
No education	36.4	40.3	66.8	58.5	55.3	20.0	383
Primary 1-4	26.8	40.1	62.0	56.3	50.0	13.6	798
Primary 5-8	41.7	53.5	71.4	67.2	60.7	23.6	1,220
Secondary+	66.9	69.3	87.8	86.0	84.3	46.6	859
Wealth quintile							
Lowest	30.3	41.4	61.3	60.3	51.8	15.4	412
Second	35.5	39.9	68.7	59.0	57.3	15.6	640
Middle	41.4	48.9	66.6	65.4	58.2	21.0	699
Fourth	46.3	56.7	75.4	71.3	65.6	29.5	709
Highest	58.3	69.0	85.4	80.3	77.9	44.2	802
District							
Blantyre	64.9	68.0	89.3	85.3	82.3	47.0	316
Kasungu	29.5	40.7	48.0	51.0	43.1	12.6	156
Machinga	56.4	70.7	74.2	70.6	73.7	48.2	114
Mangochi	30.3	43.4	68.1	59.1	51.6	18.9	150
Mzimba	30.2	71.0	55.8	69.8	51.2	17.1	212
Salima	28.4	28.0	64.7	52.9	47.4	7.7	78
Thyolo	43.3	46.0	70.9	59.1	58.5	21.2	169
Zomba	32.1	46.6	67.2	53.4	50.3	21.4	159
Lilongwe	50.5	53.5	71.0	66.3	66.5	37.3	542
Mulanje	51.2	40.2	79.4	68.3	67.4	28.1	114
Other districts	42.7	51.1	76.9	72.2	65.9	22.0	1,250
Total	44.1	52.8	72.9	68.5	63.6	26.8	3,261

To assess women's degree of acceptance of wife beating, the 2004 MDHS survey asked women, "Sometimes a husband is annoyed or angered by things which his wife does. In your opinion, is a husband justified in hitting or beating his wife in the following situations?" The five situations presented to women for their opinion are: if she burns the food, if she argues with him, if she goes out without telling him, if she neglects the children, and if she refuses to have sex with him.

The first five columns in Table 3.12.1 show how acceptance of wife beating varies for each reason. The last column gives the percentages of women who feel that wife beating is justified for at least one of the given reasons. A woman who believes that a husband is justified in hitting or beating his wife for any reason at all may believe herself to be of low status, both absolutely and relative to men. Such a perception could act as a barrier to accessing health care for her and her children, could affect her attitude toward contraceptive use, and could impact her general well being.

Twenty-eight percent of women agree with at least one of the selected reasons for wife beating. Neglecting the children was the reason for which women were most likely to find wife beating justified (17 percent). Differentials across respondents' background characteristics are small, although younger women, married women, rural women, and women with less than secondary education are more likely to accept justifications for wife beating. Women in the Northern Region are much more likely than women in other regions to agree with at least one reason for wife beating (45 percent compared to 32 percent or less).

Table 3.12.2 shows men's perception on justifications for wife beating. Interestingly, men are less likely than women to justify wife beating for any reason (16 percent compared to 28 percent). In general, younger men, never-married men, men with no living children, men in the Northern or Central Regions, and men in the lower wealth quintiles are more likely than other men to agree to wife beating for any reason.

The extent of control women have over when and with whom they have sex has important implications for demographic and health outcomes. To measure women's agreement with the idea that a woman has the right to refuse to have sex with her husband, the 2004 MDHS asked respondents whether a wife is justified in refusing to have sex with her husband under four circumstances: she is tired or not in the mood, she has recently given birth, she knows her husband has had sex with other women, and she knows her husband has a sexually transmitted disease. These four circumstances for which women's opinions are sought have been chosen because they are effective in combining issues of women's rights and consequences for women's health.

Table 3.13.1 shows the percentage of women who say that women are justified in refusing to have sex with their husband for specific reasons, by background characteristics. The table also shows how this indicator of women's empowerment varies with the other two indicators, namely with women's participation in decisionmaking and women's attitudes toward wife beating. It is worth noting that, unlike the previous indicator of empowerment, this indicator is positively related to empowerment: the more reasons women agree with, the higher is their empowerment in terms of a belief in women's sexual rights.

Table 3.12.1 Women's attitude towards wife beating

Percentage of women who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Malawi 2004

Background characteristic	Husband is justified in hitting or beating his wife if she:					Agrees with at least one specified reason	Number of women
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sex with him		
Age							
15-19	14.2	14.8	15.9	20.9	13.5	31.8	2,392
20-24	12.0	12.8	13.9	18.4	14.4	29.8	2,870
25-29	10.8	10.9	14.9	16.7	14.2	27.6	2,157
30-34	9.1	10.5	11.6	14.7	12.4	24.4	1,478
35-39	10.6	9.7	12.1	14.1	13.1	25.8	1,117
40-44	9.5	10.5	13.5	15.5	14.2	27.4	935
45-49	9.7	8.1	12.4	13.7	12.5	24.7	749
Marital status							
Never married	11.1	11.5	13.0	17.5	10.8	26.9	1,970
Married or living together	11.7	12.3	14.6	17.6	14.8	29.2	8,312
Divorced/separated/widowed	10.1	9.1	11.0	14.1	11.1	24.5	1,416
Number of living children							
0	12.5	13.0	14.4	18.5	12.9	29.7	2,655
1-2	11.7	12.3	13.9	17.5	14.2	28.8	4,092
3-4	10.8	11.0	13.4	16.5	13.7	27.6	2,726
5+	10.1	10.5	13.9	15.7	13.5	26.3	2,225
Residence							
Urban	6.3	7.1	10.1	10.5	8.6	18.1	2,076
Rural	12.5	12.8	14.7	18.6	14.7	30.4	9,621
Region							
Northern	17.7	17.6	24.5	28.2	22.6	45.1	1,552
Central	13.7	14.6	15.3	20.2	17.5	31.8	4,734
Southern	7.5	7.6	9.6	11.4	7.7	20.2	5,412
District							
Blantyre	4.0	3.9	4.8	6.2	4.0	10.1	914
Kasungu	24.9	25.8	32.6	38.2	27.5	50.4	497
Machinga	5.6	3.1	3.1	4.9	4.6	12.5	427
Mangochi	9.1	12.1	12.4	15.9	11.7	28.0	599
Mzimba	20.2	21.0	28.4	29.5	23.2	47.4	778
Salima	10.0	8.9	8.8	12.3	26.7	35.8	303
Thyolo	11.4	9.5	11.9	14.8	8.7	24.2	618
Zomba	6.7	8.4	8.7	9.6	7.0	18.5	637
Lilongwe	10.8	11.6	11.3	13.9	13.6	20.5	1,705
Mulanje	7.4	7.5	9.3	10.1	9.6	19.9	512
Other districts	12.1	12.6	15.2	19.9	14.7	32.8	4,708
Education							
No education	11.8	11.4	13.4	16.3	15.1	28.3	2,734
Primary 1-4	13.7	12.8	13.9	17.2	15.0	30.2	2,998
Primary 5-8	11.6	12.5	15.8	19.0	14.3	30.2	4,154
Secondary+	6.5	9.2	10.2	14.1	7.8	20.3	1,811
Employment							
Not employed	10.6	10.8	12.5	16.3	13.6	26.5	5,235
Employed for cash	10.1	12.1	15.6	17.3	13.8	29.7	2,033
Employed not for cash	12.9	12.9	14.8	18.2	13.7	29.7	4,417
Number of decisions in which woman has final say¹							
0	12.5	12.7	14.6	17.9	12.9	27.7	2,945
1-2	12.1	13.4	15.7	19.2	15.1	31.1	4,501
3-4	10.9	10.9	13.1	16.9	14.4	29.9	2,057
5	9.0	8.2	9.9	12.2	11.0	21.6	2,195
Wealth quintile							
Lowest	13.2	12.8	14.4	17.7	14.7	30.0	2,037
Second	12.5	12.8	14.8	18.2	16.6	31.9	2,277
Middle	13.0	14.3	14.6	20.3	15.8	32.0	2,383
Fourth	11.6	12.2	15.5	18.9	14.3	30.0	2,361
Highest	7.3	7.6	10.7	11.6	7.8	18.8	2,639
Total	11.4	11.8	13.9	17.2	13.7	28.2	11,698

Note: Total includes 13 women with missing information on employment.

¹ Either by herself or jointly with others

Table 3.12.2 Men's attitude towards wife beating

Percentage of men who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Malawi 2004

Background characteristic	Husband is justified in hitting or beating his wife if she:					Agrees with at least one specified reason	Number of men
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sex with him		
Age							
15-19	7.8	14.2	10.6	14.2	11.0	27.9	650
20-24	5.4	11.5	11.6	12.5	9.1	21.9	587
25-29	3.9	5.2	5.3	7.1	4.0	12.0	634
30-34	3.0	4.9	4.5	6.0	6.6	13.1	485
35-39	1.8	3.7	4.8	5.0	4.7	9.5	294
40-44	1.4	2.0	2.5	2.9	2.0	6.5	282
45-49	1.5	4.9	2.5	2.3	2.2	5.4	182
50-54	2.4	4.5	4.4	5.9	6.4	12.9	148
Marital status							
Never married	7.1	11.9	9.8	12.9	10.2	23.8	1,084
Married or living together	2.7	5.3	5.4	6.2	4.5	12.1	2,079
Divorced/separated/widowed	5.3	8.3	6.4	6.1	10.6	15.1	98
Number of living children							
0	6.6	11.8	9.7	12.7	9.9	22.9	1,253
1-2	3.2	5.3	6.6	5.8	4.5	13.3	794
3-4	2.5	5.1	4.9	6.2	4.8	11.7	588
5+	2.2	4.4	3.6	5.3	4.3	10.0	625
Residence							
Urban	4.6	5.5	5.7	5.8	6.5	14.1	669
Rural	4.1	8.1	7.2	9.1	6.6	16.6	2,593
Region							
Northern	6.5	10.9	10.4	14.2	11.7	22.7	423
Central	6.0	10.3	8.7	10.8	8.8	21.1	1,370
Southern	1.9	4.1	4.2	4.5	3.1	9.5	1,468
District							
Blantyre	2.1	3.1	2.8	3.0	3.9	6.8	316
Kasungu	6.2	12.5	8.1	12.5	8.3	22.5	156
Machinga	1.5	4.6	3.5	1.4	0.7	6.5	114
Mangochi	2.8	5.0	4.0	5.6	3.6	10.0	150
Mzimba	6.7	12.0	7.8	12.9	10.2	21.2	212
Salima	5.8	9.2	8.6	7.5	12.0	17.5	78
Thyolo	3.5	4.7	2.4	6.3	2.0	11.5	169
Zomba	1.6	6.6	5.1	6.3	5.6	13.7	159
Lilongwe	6.0	7.2	8.2	8.5	9.3	19.0	542
Mulanje	2.4	8.6	9.5	10.4	5.3	16.6	114
Other districts	4.2	8.5	8.3	9.9	6.7	17.9	1,250
Education							
No education	3.1	5.7	3.8	4.8	5.6	12.2	383
Primary 1-4	5.3	9.6	7.4	10.6	9.7	20.3	798
Primary 5-8	5.0	9.6	8.5	9.9	7.0	18.0	1,220
Secondary+	2.5	3.8	5.5	6.0	3.6	11.3	859
Number of decisions in which a woman should have final say¹							
0	(0.0)	(3.0)	(5.1)	(5.9)	(7.8)	(12.9)	35
1-2	5.4	9.1	9.1	9.4	7.8	19.2	911
3-4	3.8	7.1	6.1	8.1	6.1	14.9	2,316
Wealth quintile							
Lowest	7.0	11.5	7.7	11.0	9.8	19.0	412
Second	4.9	9.1	7.5	11.0	6.8	17.7	640
Middle	3.9	8.0	7.7	8.9	7.2	16.4	699
Fourth	3.4	6.5	5.2	7.1	4.8	15.0	709
Highest	3.2	5.0	6.9	5.9	5.8	14.0	802
Total	4.2	7.6	6.9	8.4	6.6	16.1	3,261

Note: Figures in parentheses are based on 25-49 cases.

¹ Either by herself or jointly with others

Fifty-two percent of women agree that a woman is justified in refusing sex for all selected reasons and only 13 percent say that a woman is not justified in refusing sex for any of the selected reasons. In general, women are most likely to justify refusing sex if a woman recently gave birth (80 percent), perhaps because it is a cultural taboo in Malawi to have sex right after birth. Hence this finding may not be a sign of empowerment as much as adherence to an important traditional belief. The next most accepted reasons for refusing sex are the knowledge that the husband has a sexually transmitted disease (74 percent), and if the husband has sex with other women (71 percent). Women are the least likely to agree with refusing sex because the woman is tired or not in the mood (64 percent).

There is little variation in this index by background characteristics. The percentage of women who say that a woman is justified in refusing sex for all the specified reasons increases with the woman's education and independence in decisionmaking. Women in the Southern Region are more likely than women in other regions to agree with all of the reasons for refusing sex (59 percent compared with 51 percent in the Northern Region and 45 percent in the Central Region).

Table 3.13.2 looks at the same issue from the men's perspective. Men are more likely than women to think that wives are justified in refusing sex with their husbands for each of the specified reasons. While 74 percent of women say that a wife is justified to refuse sex with her husband if the husband has a sexually transmitted disease, the corresponding proportion for men is 81 percent. Men are least likely to justify a wife refusing sex because she is tired or not in the mood (67 percent), but they are still slightly more likely to find this reason justifiable than women (64 percent).

As in the case of women, there are small variations in this index by background characteristics. The differentials among men are similar to those of women. For example, men in the Southern Region are also more likely than men in other regions to agree with all of the reasons for refusing sex (60 percent compared with 51 percent in the Central Region and 42 percent in the Northern Region).

Table 3.13.1 Women's attitude towards refusing sex with husband

Percentage of women who believe that a wife is justified in refusing to have sex with her husband for specific reasons, by background characteristics, Malawi 2004

Background characteristic	Wife is justified in refusing sex with husband if she:				Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number of women
	Knows husband has a sexually transmitted disease	Knows husband has had sex with other women	Has recently given birth	Is tired or not in the mood			
Age							
15-19	66.0	65.6	69.1	57.7	47.1	22.1	2,392
20-24	74.2	72.8	81.8	67.2	53.4	10.7	2,870
25-29	76.6	72.7	83.4	65.6	53.5	9.5	2,157
30-34	77.3	73.2	83.6	65.7	53.0	9.5	1,478
35-39	76.7	71.2	83.6	68.6	55.4	10.5	1,117
40-44	75.8	72.0	83.7	65.6	54.0	10.0	935
45-49	76.3	72.8	80.5	61.2	51.9	12.1	749
Marital status							
Never married	65.9	65.2	65.8	56.7	47.9	24.5	1,970
Married or living together	75.3	72.2	83.0	65.9	53.0	10.3	8,312
Divorced/separated/widowed	76.5	72.9	82.1	66.0	53.8	10.2	1,416
Number of living children							
0	67.9	67.0	70.0	58.3	48.2	20.9	2,655
1-2	75.6	72.7	82.9	66.6	53.4	10.0	4,092
3-4	75.7	71.7	82.1	65.8	53.4	10.9	2,726
5+	75.3	72.4	84.0	65.9	53.5	10.0	2,225
Residence							
Urban	79.8	76.5	83.8	69.7	61.2	11.1	2,076
Rural	72.6	70.0	79.1	63.3	50.3	13.0	9,621
Region							
Northern	80.1	71.0	85.3	65.3	51.1	6.7	1,552
Central	68.1	67.0	75.0	55.8	44.6	17.4	4,734
Southern	77.1	74.8	82.8	71.7	59.3	10.3	5,412
Education							
No education	69.5	65.9	78.1	61.5	46.7	13.6	2,734
Primary 1-4	71.0	69.5	78.5	62.5	49.6	14.8	2,998
Primary 5-8	75.5	72.7	80.8	65.2	53.7	11.8	4,154
Secondary or higher	81.4	78.3	83.3	70.0	61.5	9.8	1,811
Employment							
Not employed	70.7	69.1	76.7	61.6	50.2	16.1	5,235
Employed for cash	78.4	74.8	84.9	67.4	55.6	9.0	2,033
Employed not for cash	75.5	71.8	81.6	66.2	53.0	10.3	4,417
Number of decisions in which woman has final say¹							
0	67.8	65.4	71.4	60.3	48.4	19.7	2,945
1-2	74.1	73.0	81.4	66.0	52.8	11.2	4,501
3-4	77.8	73.3	85.0	64.5	51.8	8.2	2,057
5	77.6	73.0	83.7	66.5	56.5	10.5	2,195
Number of reasons wife beating is justified							
0	73.5	71.3	78.8	65.4	55.3	14.9	8,395
1-2	76.0	68.7	81.6	59.3	42.2	7.3	1,975
3-4	71.6	73.2	83.6	65.5	45.1	6.5	898
5	75.8	74.7	86.6	66.6	53.6	7.2	430
Wealth quintile							
Lowest	70.0	67.4	77.5	61.8	48.7	14.6	2,037
Second	71.3	69.5	79.2	63.6	50.0	13.5	2,277
Middle	71.9	68.4	78.4	62.4	48.9	13.1	2,383
Fourth	74.9	71.9	81.1	63.5	51.0	11.7	2,361
Highest	79.9	77.2	82.9	69.6	61.1	11.0	2,639
Total	73.9	71.1	80.0	64.4	52.2	12.7	11,698

Note: Total includes 13 women with missing information on employment.

¹ Either by herself or jointly with others

Table 3.13.2 Men's attitude towards a woman refusing sex with husband

Percentage of men who believe that a wife is justified in refusing to have sex with her husband for specific reasons, by background characteristics, Malawi 2004

Background characteristic	Wife is justified in refusing sex with husband if she:				Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number of men
	Knows husband has a sexually transmitted disease	Knows husband has had sex with other women	Has recently given birth	Is tired or not in the mood			
Age							
15-19	75.1	66.3	80.8	58.7	46.8	11.3	650
20-24	80.6	74.1	87.3	65.4	52.8	5.1	587
25-29	82.8	75.0	91.3	71.1	58.1	4.9	634
30-34	81.5	73.2	89.9	70.1	55.5	6.9	485
35-39	87.0	79.3	98.3	70.8	59.2	1.3	294
40-44	84.0	76.6	95.2	69.1	55.8	2.1	282
45-49	87.3	77.8	94.1	64.5	54.3	2.2	182
50-54	80.2	72.4	89.1	62.0	49.3	6.9	148
Marital status							
Never married	76.7	69.3	82.7	61.7	50.9	9.8	1,084
Married or living together	83.6	75.8	92.6	69.4	55.9	3.9	2,079
Divorced/separated/widowed	83.8	68.3	92.2	56.0	42.2	3.8	98
Residence							
Urban	84.5	78.5	87.5	69.5	62.7	7.9	669
Rural	80.5	72.1	89.8	65.7	51.5	5.4	2,593
Region							
Northern	77.0	71.0	87.9	52.2	42.3	7.3	423
Central	80.1	72.1	87.9	62.3	50.9	6.5	1,370
Southern	83.7	75.3	91.0	74.5	59.8	4.9	1,468
Education							
No education	79.7	70.1	91.3	63.0	47.9	5.2	383
Primary 1-4	76.9	67.8	85.0	61.6	46.8	8.6	798
Primary 5-8	81.2	73.3	90.1	63.9	52.1	4.9	1,220
Secondary or higher	86.2	80.3	91.3	76.2	65.4	5.1	859
Wealth quintile							
Lowest	80.4	69.7	88.6	57.7	45.4	6.7	412
Second	80.8	74.6	91.5	68.0	52.4	4.2	640
Middle	80.5	71.0	89.8	64.1	49.9	4.4	699
Fourth	81.0	72.0	88.0	66.7	54.2	7.2	709
Highest	83.1	77.7	88.7	71.6	62.3	7.0	802
Total	81.3	73.4	89.3	66.5	53.8	5.9	3,261

FERTILITY

James Kaphuka

The 2004 Malawi Demographic and Health Survey (MDHS) collected information on current and past fertility. A set of carefully worded questions to obtain accurate and reliable data on fertility was administered to measure fertility levels, trends, and differentials. The fertility measures presented here are calculated directly from the birth history. All women age 15-49 were asked to report on all live births. Questions were asked about children still living at home, those living elsewhere, and those who had died. The women were then asked the name, month, and year of birth, sex, survival status, current age (if alive), and age at death (if dead).

The accuracy of fertility data is affected primarily by underreporting of births (especially children who died in early infancy) and misreporting of the date of birth. Errors in underreporting of births affect the estimates of fertility levels, while misreporting of dates of births can distort estimates of fertility trends. If these errors vary by socioeconomic characteristics of the women, the differentials in fertility will also be affected.

4.1 CURRENT FERTILITY LEVELS AND TRENDS

4.1.1 Fertility Levels

The most commonly used measures of current fertility are the total fertility rate (TFR) and its components, age-specific fertility rates. The TFR is a summary measure of fertility and can be interpreted as the average number of births a hypothetical woman would have at the end of her reproductive life if she were subject to the currently prevailing age-specific fertility rates (ASFRs) throughout her reproductive years (15-49). The ASFRs are a valuable measure of the age pattern of childbearing. They are defined as the number of live births to women in a particular age group divided by the number of woman-years in that age group during the specified period.

The TFR is the most significant demographic indicator in the analysis of the impact of national population programmes—in particular, family planning programmes—on individual or group reproductive behaviour. To reduce sampling errors and avoid possible problems of displacement of births, a three-year TFR was computed to provide the most recent estimates of current levels of fertility¹.

Table 4.1 presents the current TFRs and ASFRs for Malawi by urban-rural residence. The results indicate that a woman in Malawi would, on average, bear 6.0 children in her lifetime if fertility were to remain constant at the current age-specific rates measured in the survey (for the 36 months preceding the survey). The table also shows that urban women have lower fertility than their rural counterparts (4.2 children per woman compared with 6.4 children per woman), and lower

¹ Numerators of the ASFRs are calculated by summing the number of live births that occurred in the period 1 to 36 months preceding the survey (determined by the date of interview and the date of birth of the child) and classifying them by the age (in five-year groups) of the mother at the time of birth (determined by the mother's date of birth). The denominators of the rates are the number of woman-years lived in each of the specified five-year groups during the period 1 to 36 months preceding the survey.

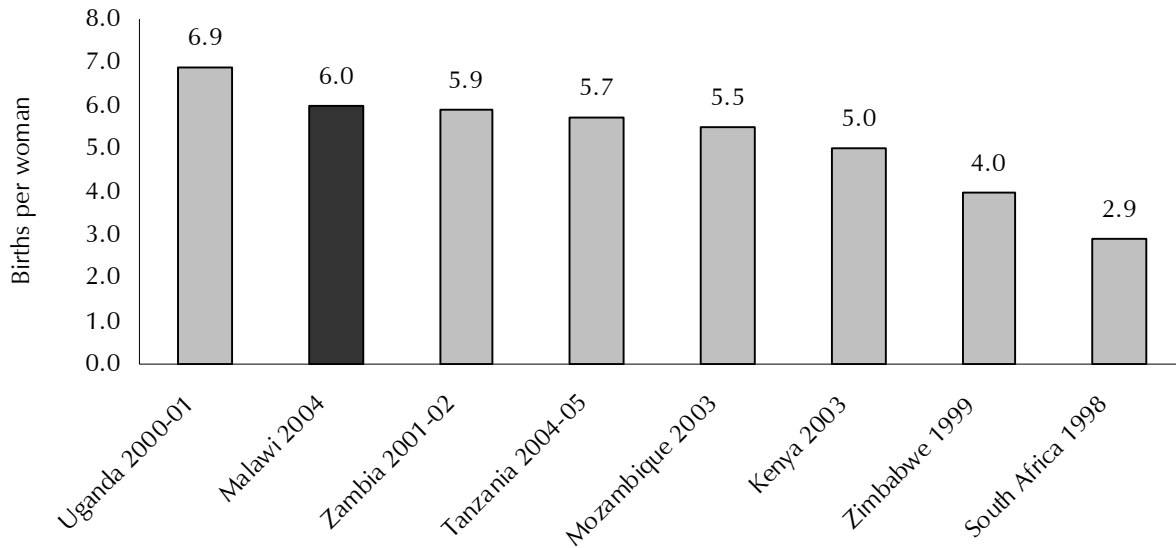
urban fertility is observed across all age groups. The TFR measured from the 2004 MDHS (6.0) is slightly lower than the TFR measured in the 2000 MDHS (6.3). Examination of the age pattern of fertility rates show that the peak of childbearing in Malawi is at ages 20-24. The same age pattern was observed in the 2000 Malawi DHS.

Table 4.1 further shows a general fertility rate of 215 live births per 1,000 women age 15-44 years and a crude birth rate of 42 births per 1,000 population. Compared with other eastern and southern African countries that have participated in the DHS programme, Malawi still has one of the highest fertility rates (see Figure 4.1).

Table 4.1 Current fertility			
Age-specific and cumulative fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence, Malawi 2004			
Age group	Residence		Total
	Urban	Rural	
15-19	109	175	162
20-24	237	308	293
25-29	195	266	254
30-34	159	233	222
35-39	97	174	163
40-44	29	87	80
45-49	22	37	35
TFR	4.2	6.4	6.0
GFR	162	227	215
CBR	37.0	43.4	42.4

Note: Rates for age group 45-49 may be slightly biased due to truncation.
TFR: Total fertility rate for ages 15-49, expressed per woman
GFR: General fertility rate (births divided by the number of women age 15-44), expressed per 1,000 women
CBR: Crude birth rate, expressed per 1,000 population

Figure 4.1 Total Fertility Rates for Selected Sub-Saharan Countries



4.1.2 Fertility Differentials

This section examines associations between a woman's background characteristics and her fertility. Fertility varies by residence, educational background, and other background characteristics of a woman. Table 4.2 and Figure 4.2 show fertility differentials by urban-rural residence, region, education, wealth index quintile and by the ten oversampled districts. The analysis of the fertility differentials in this report is done using the TFR, percentage of currently pregnant women, and completed fertility in terms of the mean number of births to women age 40-49 by these characteristics.

As noted earlier, urban women have fewer children (average of 4.2 children per woman) than their rural counterparts (6.4 children per woman). This rural-urban difference in the TFR is the same as observed in the 2000 MDHS. There is substantial regional variation in the TFR between the Central and the other two regions. The TFR in the Central Region is 6.4 births per woman, while in the Southern and Northern regions it is 5.8 and 5.6 births per woman, respectively. Among the ten oversampled districts, The TFR varies from 4.8 births per woman in Blantyre to 7.2 per woman in Mangochi.

In addition to urban-rural, region, and district differentials, there are variations in TFR when measuring a woman's education and economic status (measured by the wealth index). Education consistently appears as an important variable in the analysis of fertility-related behaviour. Generally, the TFR declines as educational level increases. Women with no education or with primary education 1-4 have a TFR that is higher than that of women with primary education 5-8 and secondary or higher education levels (Table 4.2). A similar relationship is reflected in the association between fertility rates and the wealth index, which shows that women have fewer children as wealth

increases. The TFR for women in the lowest (poorest) quintile is 7.1 births per woman, compared with 4.1 births for women in the highest (richest) quintile.

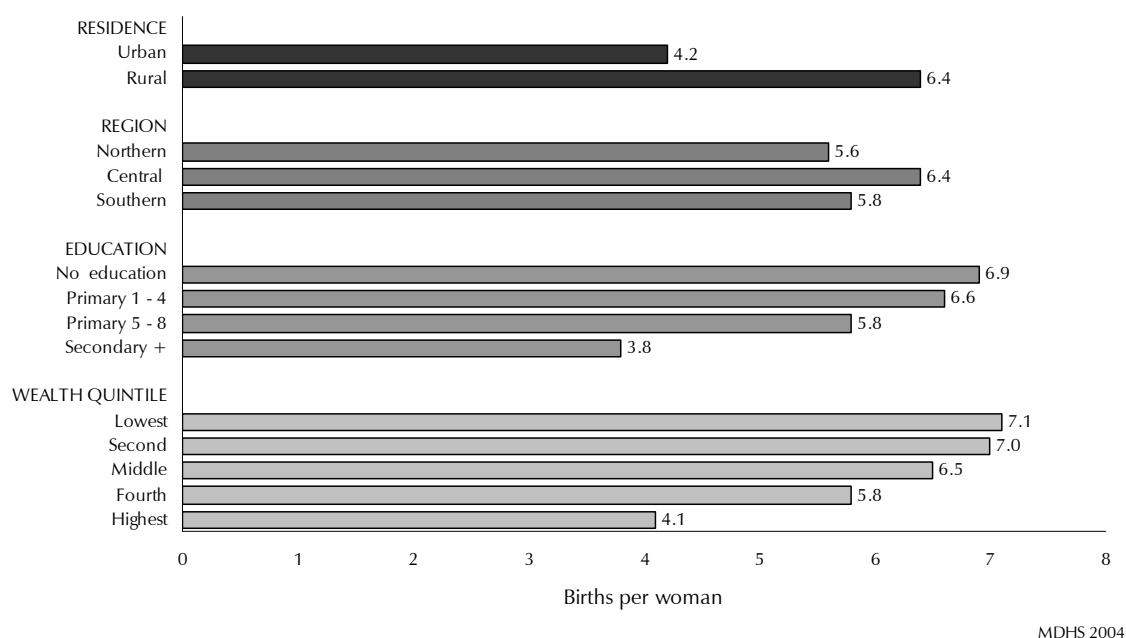
Table 4.2 also shows that at the time of the survey 12 percent of women were pregnant. The proportion of pregnant women in urban areas, those with secondary and higher education, and women in the highest wealth quintile is lower than those for the other population subgroups.

Table 4.2 Fertility by background characteristics			
Total fertility rate for the three years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49 years, by background characteristics, Malawi 2004			
Background characteristic	Total fertility rate ¹	Percentage currently pregnant ¹	Mean number of children ever born to women age 40-49
Residence			
Urban	4.2	8.9	5.7
Rural	6.4	12.8	6.7
Region			
Northern	5.6	11.2	6.6
Central	6.4	12.3	6.9
Southern	5.8	12.1	6.3
District			
Blantyre	4.8	11.9	5.4
Kasungu	7.0	12.5	7.4
Machinga	7.0	10.6	6.2
Mangochi	7.2	10.0	6.5
Mzimba	5.5	11.7	6.7
Salima	6.8	15.0	6.5
Thyolo	5.7	14.4	6.1
Zomba	5.3	12.1	6.1
Lilongwe	5.7	10.4	6.5
Mulanje	5.6	13.6	6.0
Other districts	6.3	12.5	6.8
Education			
No education	6.9	11.8	6.7
Primary 1-4	6.6	14.5	6.8
Primary 5-8	5.8	11.8	6.4
Secondary+	3.8	9.1	4.7
Wealth quintile			
Lowest	7.1	12.2	6.9
Second	7.0	14.1	6.5
Middle	6.5	14.4	6.8
Fourth	5.8	12.1	6.8
Highest	4.1	8.1	5.7
Total	6.0	12.1	6.5

¹ Women age 15-49 years

The last column in Table 4.2 shows the mean number of children ever born (CEB) to women age 40-49. This is an indicator of cumulative fertility; it reflects the fertility performance of older women who are nearing the end of their reproductive period and thus represents completed fertility. If fertility had remained stable over time, the two fertility measures, TFR and CEB, would be equal or similar. The findings show that the mean number of children ever born to women age 40-49 (6.5 children per woman) is slightly higher than the TFR for the 3 years preceding the survey (6.0 children per woman), suggesting a slight recent reduction in fertility.

Figure 4.2 Total Fertility Rate by Background Characteristics



4.1.3 Trends in Fertility

The trend in fertility can be assessed by comparing the current TFR with estimates from previous DHS surveys. Tables 4.3 and 4.4 and Figures 4.3 and 4.4 show changes in fertility rates across four surveys that were conducted in Malawi since the early 1980s: the 1984 Family Formation Survey (FFS), the 1992 MDHS, the 2000 MDHS, and the 2004 MDHS. Direct estimates of fertility for the three years preceding the survey have been used in this comparison, because a three-year rate is more robust than rates based on a shorter period of time. The TFR substantially declined from 7.6 children per woman in the 1984 FFS to 6.7 children per woman in 1992 MDHS, to 6.0 children per woman in 2004. This is a 1.5 child drop in fertility over two decades. Table 4.3 shows that since 1984 fertility has fallen primarily in older age groups (30 and above). The pace of fertility decline varied, but was fastest between 1984 and 1992 and between 2000 and 2004.

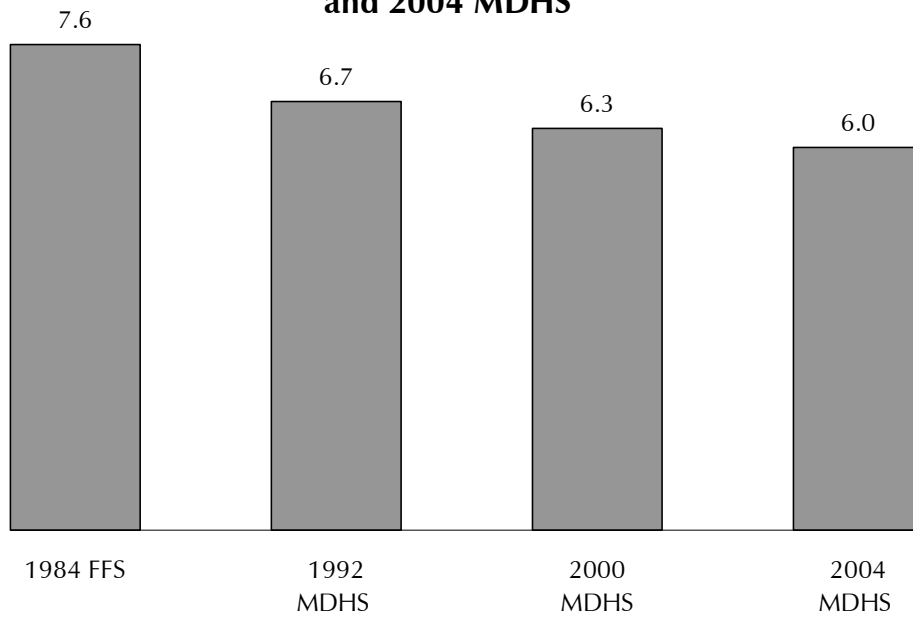
Table 4.3 Trends in age-specific fertility rates

Age-specific fertility rates (per 1,000 women) and total fertility rate for the three years preceding the survey, Malawi 1984-2004

Age group	1984 FFS ¹	1992 MDHS	2000 MDHS	2004 MDHS
15-19	202	161	172	162
20-24	319	287	305	293
25-29	309	269	272	254
30-34	273	254	219	222
35-39	201	197	167	163
40-44	129	120	94	80
45-49	83	58	41	35
TFR	7.6	6.7	6.3	6.0

¹ Data from the Family Formation Survey (FFS) are based on the four years preceding the survey.

**Figure 4.3 Trends in the Total Fertility Rate
1984 FFS, 1992 MDHS, 2000 MDHS,
and 2004 MDHS**



Note: Rates refer to the 3-year period preceding the survey, except for the FFS rate, which is for the 4-year period before the survey.

**Figure 4.4 Trends in Age-Specific Fertility Rates
1984 FFS, 1992 MDHS, 2000 MDHS, and 2004 MDHS**

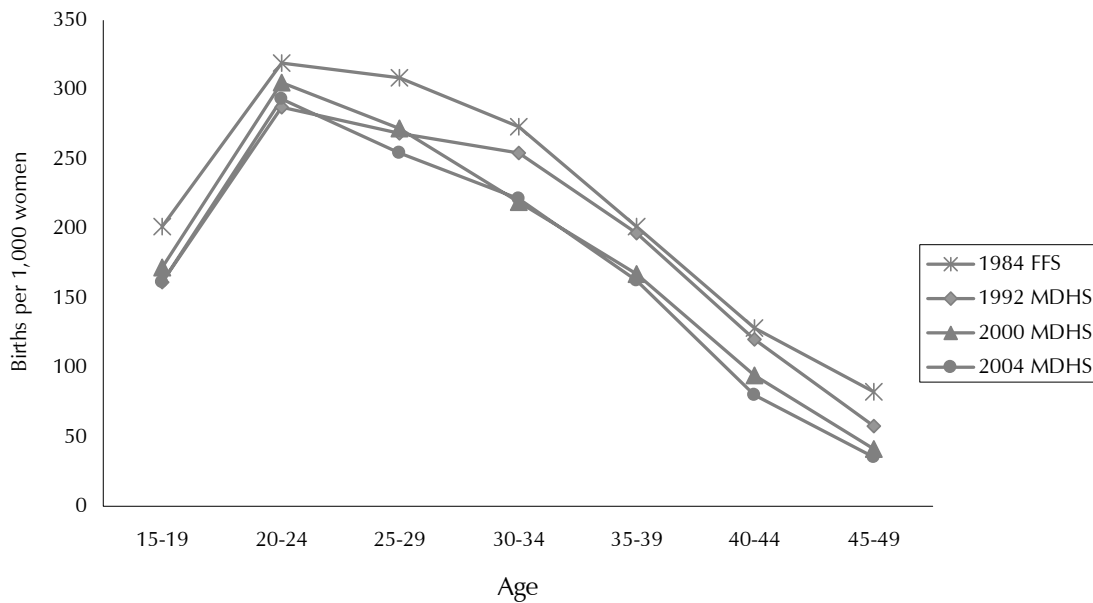


Table 4.4 Trends in fertility by background characteristics

Total fertility rate for the three years preceding the survey, by background characteristics, Malawi 1992, 2000, and 2004

Background characteristic	1992 MDHS	2000 MDHS	2004 MDHS
Residence			
Urban	5.5	4.5	4.2
Rural	6.9	6.7	6.4
Region			
Northern	6.7	6.2	5.6
Central	7.4	6.8	6.4
Southern	6.2	6.0	5.8
District			
Blantyre	na	4.3	4.8
Kasungu	na	7.0	7.0
Machinga	na	7.0	7.0
Mangochi	na	7.4	7.2
Mzimba	na	6.7	5.5
Salima	na	6.7	6.8
Thyolo	na	5.3	5.7
Zomba	na	6.2	5.3
Lilongwe	na	6.5	5.7
Mulanje	na	5.5	5.6
Other districts	na	6.8	6.3
Education			
No education	7.2	7.3	6.9
Primary 1-4	6.7	6.7	6.6
Primary 5-8	6.2	6.0	5.8
Secondary+	4.4	3.0	3.8
Total	6.7	6.3	6.0

na = Not applicable

Further information on fertility trends comes from the analysis of the fertility of age cohorts of women (i.e., by examining trends within age groups). Table 4.5 shows age-specific fertility rates (ASFRs) for successive five-year periods preceding the survey. Examining the 10-14 year, 5-9 year and 0-4 year periods preceding the survey, a decline is seen in the ASFRs for each period. Since women age 50 and above were not interviewed in the survey, the rates are truncated as the number of years before the survey increases.

Table 4.5 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Malawi 2004

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	160	164	181	176
20-24	291	296	320	292
25-29	252	274	302	296
30-34	222	226	275	[261]
35-39	162	169	[239]	-
40-44	88	[129]	-	-
45-49	[38]	-	-	-

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated.

4.2 CHILDREN EVER BORN AND CHILDREN SURVIVING

Table 4.6 presents the distribution of all women and currently married women by the number of children ever born (CEB). The table also shows the mean number of children ever born and the mean number of living children for each five-year age group. The distribution of children ever born is the outcome of lifetime fertility. Information on lifetime fertility is useful for examining the momentum of childbearing and for estimating levels of primary infertility. The number of children ever born (CEB) or current parity is based on a cross-sectional view at the time of survey. It does not refer directly to the timing of fertility of the individual respondent but is a measure of her completed fertility.

Table 4.6 Children ever born and living															
Percent distribution of all women and currently married women by number of children ever born (CEB), and mean number of children ever born and mean number of living children, according to age group, Malawi 2004															
Age	Number of children ever born											Total	Number of women	Mean number of CEB	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	74.7	21.3	3.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,392	0.30	0.26
20-24	15.8	32.1	33.0	15.4	2.9	0.8	0.0	0.0	0.0	0.0	0.0	100.0	2,870	1.60	1.40
25-29	4.9	9.4	21.1	29.3	22.6	9.0	2.9	0.6	0.2	0.0	0.0	100.0	2,157	2.99	2.54
30-34	2.6	5.0	7.1	13.3	23.9	22.9	15.6	6.3	2.0	1.1	0.1	100.0	1,478	4.35	3.60
35-39	2.2	2.9	5.0	7.2	12.3	15.9	18.6	14.9	11.2	6.5	3.1	100.0	1,117	5.60	4.55
40-44	1.3	2.9	4.3	6.3	8.4	12.6	14.1	14.2	15.6	10.1	10.2	100.0	935	6.33	5.01
45-49	2.1	2.7	5.4	5.3	6.6	8.0	13.9	11.3	12.4	12.1	20.1	100.0	749	6.83	5.19
Total	20.8	15.3	14.8	12.4	10.2	7.8	6.3	4.2	3.4	2.3	2.4	100.0	11,698	3.03	2.49
CURRENTLY MARRIED WOMEN															
15-19	39.7	49.7	9.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	788	0.72	0.63
20-24	8.0	33.6	36.6	17.7	3.2	1.0	0.0	0.0	0.0	0.0	0.0	100.0	2,283	1.78	1.55
25-29	2.7	8.3	20.9	30.4	23.9	9.7	3.1	0.7	0.3	0.0	0.0	100.0	1,814	3.11	2.67
30-34	1.9	4.0	6.6	12.5	24.2	22.9	16.9	7.1	2.4	1.3	0.1	100.0	1,225	4.50	3.76
35-39	1.9	2.6	4.5	5.8	11.9	16.5	19.3	16.5	11.0	7.0	3.1	100.0	903	5.73	4.66
40-44	1.1	3.0	3.6	4.9	7.6	12.6	13.3	14.6	17.1	11.0	11.3	100.0	754	6.54	5.18
45-49	1.6	1.1	4.2	4.9	6.2	8.5	14.1	10.3	11.5	12.5	25.1	100.0	545	7.23	5.49
Total	7.2	17.0	17.6	14.8	12.1	9.3	7.4	5.0	3.9	2.8	3.0	100.0	8,312	3.59	2.96

Table 4.6 shows that one out of every five women does not have any children, while among married women the proportion is only 7 percent. While three in four women age 15-19 have no children, six in ten married women age 15-19 have started childbearing. Since voluntary childlessness is rare in Malawi, it is assumed that married women with no births by the time they reach the end of their reproductive years are infertile, or their husbands are. The percentage of women who are childless at the end of the reproductive period is an indirect measure of primary infertility (the proportion of women who are unable to bear children at all). The data show that less than two percent of married women remain childless by their 40s.

Table 4.6 also shows that on average, women have given birth to more than one child by their early 20s, about 3 children by their late 20s, and about 7 children by the end of their reproductive period. Overall, the mean number of children ever born is 3.0 children for all women

and 3.6 children for currently married women. There is a slight difference in the mean number of children ever born between all women and currently married women at all ages.

In addition to giving a description of average family size, information on CEB and number of children surviving also gives some indication on the extent of childhood mortality. The 2004 MDHS results indicate that on average, all women have over two surviving children, and currently married women have three children. The difference between the mean number of CEB and mean number of children still living for the two groups of women increases with a woman's age. By the end of the reproductive period, women have lost, on average, almost two of the children they had given birth to.

4.3 BIRTH INTERVALS

The study of birth intervals is important in understanding the health status of young children. That women with closely spaced births have higher fertility than women with longer birth intervals has been observed in many countries. It has also been shown that short birth intervals, particularly those less than 24 months, elevate risks of death for both children on either side of the interval; maternal health is also jeopardised when births are closely spaced. The study of birth intervals is done using two measures, namely median birth interval and proportion of non-first births that are born with an interval of 24 months or more after the previous birth. Table 4.7 shows the percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, according to selected demographic and socioeconomic variables. In general, the median length of birth interval in Malawi is 36 months. While 25 percent of births were born four or more years after a previous birth, 15 percent of births occur within two years of a previous birth, and five percent of births occur less than 18 months since the previous birth.

Table 4.7 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, according to background characteristics, Malawi 2004

Background characteristic	Months since preceding birth					Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48+			
Age								
15-19	11.4	21.8	41.3	24.9	0.6	100.0	103	27.2
20-29	5.6	11.4	40.5	25.9	16.6	100.0	4,543	33.9
30-39	4.1	8.0	30.4	24.9	32.6	100.0	2,789	38.6
40-49	3.8	7.5	20.5	22.8	45.4	100.0	785	44.9
Birth order								
2-3	5.0	10.9	39.4	25.6	19.2	100.0	3,922	34.4
4-6	4.1	8.6	33.2	25.5	28.5	100.0	3,014	37.1
7+	7.2	10.6	26.7	23.7	31.7	100.0	1,283	37.8
Sex of preceding birth								
Male	5.7	9.4	34.9	25.2	24.9	100.0	4,074	36.0
Female	4.4	10.6	35.4	25.4	24.3	100.0	4,145	35.9
Survival of preceding birth								
Living	2.9	9.0	36.1	26.4	25.6	100.0	6,972	36.5
Dead	17.0	15.4	29.7	19.2	18.6	100.0	1,247	30.5
Residence								
Urban	4.4	9.5	33.4	23.6	29.0	100.0	946	36.9
Rural	5.1	10.1	35.4	25.5	24.0	100.0	7,273	35.8
Region								
Northern	3.1	7.0	37.3	28.7	23.9	100.0	1,015	36.5
Central	5.7	11.5	35.8	23.9	23.1	100.0	3,460	34.9
Southern	5.0	9.4	34.0	25.6	26.1	100.0	3,744	36.4
District								
Blantyre	5.6	8.5	28.2	25.9	31.8	100.0	537	38.8
Kasungu	4.8	11.5	36.6	27.7	19.3	100.0	428	35.3
Machinga	5.1	12.0	36.1	23.4	23.4	100.0	358	34.6
Mangochi	5.0	10.1	36.9	23.3	24.6	100.0	499	35.4
Mzimba	3.5	5.5	37.5	28.5	25.0	100.0	519	36.7
Salima	6.4	10.3	34.9	24.2	24.2	100.0	247	35.2
Thyolo	3.3	11.6	34.7	25.7	24.7	100.0	452	36.1
Zomba	5.7	7.9	32.6	27.7	26.0	100.0	397	37.0
Lilongwe	5.6	12.8	35.3	21.8	24.4	100.0	1,083	34.7
Mulanje	4.7	10.8	31.2	26.5	26.8	100.0	340	37.2
Other districts	5.0	9.5	36.1	25.6	23.7	100.0	3,359	35.8
Education								
No education	4.9	9.7	33.9	23.8	27.6	100.0	2,617	36.5
Primary 1-4	5.3	11.2	35.5	26.4	21.6	100.0	2,428	35.3
Primary 5-8	4.6	9.6	36.7	25.8	23.2	100.0	2,602	35.7
Secondary or higher	5.9	8.2	31.8	25.0	29.1	100.0	571	37.1
Wealth quintile								
Lowest	5.4	10.4	33.6	24.5	26.1	100.0	1,659	36.2
Second	6.3	10.2	35.5	24.7	23.2	100.0	1,852	35.2
Middle	4.5	9.5	39.2	25.1	21.8	100.0	1,891	35.1
Fourth	4.6	10.6	35.7	27.8	21.3	100.0	1,632	35.7
Highest	3.9	9.3	29.5	24.1	33.3	100.0	1,186	38.6
Total	5.0	10.0	35.1	25.3	24.6	100.0	8,219	35.9

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

In general, the results indicate that younger women (mostly adolescents) have shorter birth intervals than older women in Malawi. As age increases, the median length of birth interval also

increases. There are no strong differentials in median birth interval by region. District variation ranges from 34.6 months in Machinga to 38.8 months in Blantyre.

4.4 AGE OF MOTHERS AT FIRST BIRTH

The onset of childbearing is an important fertility indicator. Women who marry early are typically exposed to pregnancy for a longer period, and early childbearing often takes place, the combination of which generally leads to a large family size. The age at which childbearing commences is an important determinant of the overall level of fertility as well as the health and welfare of the mother and the child. In some societies, postponement of first births due to an increase in age at marriage has contributed to overall fertility decline. However, in Malawi, it is not uncommon for women to have children before getting married.

Table 4.8 shows the percentage of women who have given birth by specified ages and the median age at first birth, according to current age. The results show that the initiation of childbearing has not changed much over time. Data from the 2000 MDHS show almost the same pattern, suggesting that there has been no significant change in age at first birth in Malawi in the recent past years. Table 4.8 shows that the median age at first birth has not changed in the past decades. The higher median age at first birth for the oldest cohort (19.4 years) may be affected by recall lapse. The results indicate that women are delaying having their first child. While 8 percent of women age 45-49 had their first child by age 15, less than 2 percent of women age 15-19 did so. The percentage of women who had their first child by age 18 years is highest among women age 35-39 (42 percent) and lowest among women age 45-49 (33 percent).

Current age	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
15-19	1.5	na	na	na	na	74.7	2,392	a
20-24	4.6	34.1	63.2	na	na	15.8	2,870	19.0
25-29	5.6	33.8	64.2	82.8	92.7	4.9	2,157	19.0
30-34	7.9	37.8	64.8	81.9	92.7	2.6	1,478	18.9
35-39	11.4	41.6	63.6	80.0	91.1	2.2	1,117	18.8
40-44	8.4	38.2	64.2	80.9	92.4	1.3	935	18.9
45-49	8.0	33.1	55.2	73.2	84.9	2.1	749	19.4

na = Not applicable
a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

4.5 MEDIAN AGE AT FIRST BIRTH BY BACKGROUND CHARACTERISTICS

Age at first birth varies by demographic and socioeconomic characteristics of the woman. Table 4.9 shows the median age at first birth among women age 20-49 years and 25-49 years, by current age and background characteristics. The median age at first birth for women age 20-49 for Malawi is 19.0 years. Urban women have their first birth half a year later than their rural counterparts. Across regions, first births in the Central Region occur later than in the Southern and

Northern Regions (19.4 years compared to 19.0 years or younger). For the oversampled districts, the median age at first birth ranges from 18.4 years in Mulanje and Thyolo to 19.6 years in Lilongwe.

Age at first birth increases with education. The data also show that women who belong to the wealthiest quintile have their first child about a year later than women in most other wealth quintiles.

Table 4.9 Median age at first birth by background characteristics

Median age at first birth among women age 20-49 years, by current age and background characteristics, Malawi 2004

Background characteristic	Current age						Women age 20-49	Women age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49		
Residence								
Urban	20.0	19.6	18.8	19.1	18.7	19.3	19.5	19.2
Rural	18.9	18.9	18.9	18.7	18.9	19.5	18.9	18.9
Region								
Northern	18.7	19.0	19.0	19.4	19.4	19.0	19.0	19.2
Central	19.6	19.3	19.0	19.2	19.1	19.9	19.4	19.3
Southern	18.7	18.7	18.8	18.0	18.5	19.1	18.7	18.7
District								
Blantyre	18.8	18.8	18.9	18.3	17.8	18.9	18.7	18.6
Kasungu	19.1	18.8	18.6	19.2	19.0	19.1	18.9	18.9
Machinga	18.3	18.3	19.0	18.8	18.5	20.2	18.6	18.7
Mangochi	18.2	18.3	18.4	18.6	18.6	20.5	18.5	18.6
Mzimba	18.9	19.3	19.2	19.6	19.4	20.0	19.2	19.4
Salima	19.3	19.0	18.6	20.0	19.8	19.5	19.2	19.1
Thyolo	18.0	18.5	19.2	18.6	19.0	17.9	18.4	18.7
Zomba	19.0	19.1	18.6	17.9	18.2	18.8	18.8	18.6
Lilongwe	a	19.5	18.9	19.4	18.8	20.5	19.6	19.4
Mulanje	18.4	18.4	18.7	17.9	18.0	19.1	18.4	18.4
Other districts	19.2	19.1	19.1	18.5	19.1	19.4	19.1	19.0
Education								
No education	17.8	18.2	18.5	18.0	18.8	19.7	18.4	18.5
Primary 1-4	18.5	18.9	19.1	18.2	18.3	19.4	18.7	18.8
Primary 5-8	18.8	18.9	18.9	19.0	19.0	19.0	18.9	18.9
Secondary+	a	21.6	22.2	21.4	21.7	19.6	a	21.6
Wealth quintile								
Lowest	18.8	19.0	18.8	17.9	18.7	20.1	18.8	18.8
Second	18.8	19.0	18.3	18.7	19.0	19.7	18.9	18.9
Middle	18.7	18.5	18.8	18.6	18.6	19.1	18.7	18.7
Fourth	19.1	19.0	19.3	18.4	19.1	19.2	19.0	19.0
Highest	a	19.8	19.3	19.6	18.9	19.3	19.7	19.5
Total	19.0	19.0	18.9	18.8	18.9	19.4	19.0	19.0

a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group

4.6 ADOLESCENT FERTILITY

Adolescent childbearing has potentially negative demographic and social consequences. Children born to very young mothers face an increased risk of illness and death. This may be due to the fact that teenage mothers are more likely to suffer from pregnancy and delivery complications than older mothers, resulting in higher morbidity and mortality for both themselves and their

children. In addition, early childbearing may foreclose a teenager's ability to pursue educational or job opportunities.

Table 4.10 shows the percentage of women age 15-19 who are mothers or pregnant with their first child, by background characteristics. One in three adolescents has begun childbearing; one in four has already had a child and a further 9 percent are currently pregnant. There is a substantial difference in childbearing among teenagers who live in urban and rural areas (25 percent compared with 36 percent, respectively). At the regional level, the proportion of teenagers who have started childbearing is highest in the Southern Region (40 percent) compared with the Northern Region (33 percent) and the Central Region (28 percent). Among the oversampled districts, Mangochi has the highest proportion of teenagers who have started childbearing (48 percent), while Lilongwe District has the lowest (25 percent).

Background characteristic	Percentage who are:		Percentage who have begun childbearing	Number of women
	Mothers	Pregnant with first child		
Age				
15	1.4	1.8	3.2	445
16	6.0	5.5	11.5	467
17	21.9	8.8	30.7	427
18	37.8	12.1	49.9	554
19	53.9	14.0	67.9	499
Residence				
Urban	18.2	6.6	24.8	455
Rural	27.0	9.2	36.2	1,937
Region				
Northern	24.9	7.7	32.7	371
Central	20.1	7.9	28.1	972
Southern	30.3	9.8	40.1	1,049
District				
Blantyre	27.1	9.9	37.0	187
Kasungu	19.3	8.7	28.0	100
Machinga	29.1	11.0	40.1	83
Mangochi	43.3	4.7	48.0	114
Mzimba	24.1	9.4	33.5	182
Salima	20.4	11.6	32.0	51
Thyolo	29.8	14.7	44.4	120
Zomba	29.2	9.2	38.4	133
Lilongwe	18.3	6.3	24.6	334
Mulanje	28.6	14.7	43.3	96
Other districts	24.7	8.0	32.7	993
Education				
No education	48.8	14.3	63.1	132
Primary 1-4	32.2	9.6	41.8	580
Primary 5-8	24.4	8.9	33.2	1,196
Secondary+	13.2	5.7	18.9	484
Wealth quintile				
Lowest	32.6	10.7	43.2	395
Second	36.1	10.7	46.9	412
Middle	25.4	10.4	35.8	444
Fourth	23.6	8.4	32.0	511
Highest	15.1	5.3	20.4	629
Total	25.3	8.7	34.1	2,392

The results further show that there is a negative relationship between adolescent childbearing and both educational level and wealth status. For example, while 63 percent of adolescents with no education have begun childbearing, the proportion for those with at least secondary education is just 19 percent. Adolescents in the lowest wealth quintile are also more than twice as likely to have begun childbearing compared with those in the wealthiest quintile.

Jane Namasasu

Each year, over 210 million women worldwide become pregnant, and 30 million (15 percent) develop complications, which lead to death in over half a million women. It is estimated that between 10 percent and 20 percent of these pregnancies were unwanted at the time of conception. Thus, up to 100,000 maternal deaths could be avoided if women who did not want children practiced effective fertility regulation. When we take into consideration that for every woman who dies a maternal death, about 30 more suffer from serious conditions that can affect them for the rest of their lives, it is estimated that preventing unwanted pregnancies would avert a total of 4.6 million disability-adjusted life years (DALYs) worldwide (UNFPA, 2001).

Thus, effective fertility regulation actually has the potential to contribute to better maternal health beyond simply reducing the proportion of births that are unwanted. In fact, increased use of contraception does have an obvious and direct effect on the number of maternal deaths, simply by reducing the number of pregnancies.

A recent study conducted in Malawi indicated that the most frequent direct obstetric complications treated in 48 hospitals were obstructed and prolonged labour (40 percent), followed by complications of abortion (30 percent). The high proportion of abortion complications did not differentiate between complicated and uncomplicated cases of abortion. Nor did it do so with respect to spontaneous or induced abortion (Ministry of Health, 2005a). Increased use of fertility regulation to avoid unwanted pregnancies will lead to a decrease in the number of induced abortions in the country.

This chapter presents the findings of the 2004 MDHS on contraceptive knowledge, contraceptive use, attitudes, and reproductive behaviour and intentions. The main focus is on women. However, some results are included for men. In order to evaluate trends in Malawi over the years, comparisons are made where feasible.

5.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Knowledge about fertility control is an important step toward getting access to and using a suitable contraceptive method in a timely and effective manner. Information on knowledge of contraception was collected in two ways. First, respondents were asked to name ways or methods couples can use to prevent or delay pregnancy. When a respondent failed to mention a particular method spontaneously, the interviewer described the method and asked whether the respondent knew it. Using this approach, information was collected for nine modern family planning methods: female and male sterilisation, the pill, the IUD, injectables, implants, male and female condoms, and emergency contraception. Information was also collected on three traditional methods: the lactational amenorrhoea method (LAM), rhythm or natural family planning, and withdrawal. Provision was also made in the questionnaire to record any other methods named spontaneously by respondents. Both prompted and unprompted knowledge were combined in this survey.

In Table 5.1.1, knowledge of contraceptive methods is presented for all women, for currently married women, for sexually active unmarried women, for sexually inactive unmarried women, and for women with no sexual experience, by specific method. The 2004 MDHS finds that 97 percent of

all women know at least one contraceptive method. Knowledge of a modern method of family planning is highest for currently married women at 99 percent. There is no difference in level of knowledge of a modern contraceptive method among unmarried women with sexual experience, whether they are sexually active or not. Unmarried women with no sexual experience have much lower levels of knowledge of any contraceptive method than currently married women and unmarried women with sexual experience.

Table 5.1.1 Knowledge of contraceptive method: women

Percentage of all women, of currently married women, of sexually active unmarried women, of sexually inactive unmarried women, and of women with no sexual experience who know any contraceptive method, by specific method, Malawi 2004

Method	All women	Currently married women	Unmarried women who ever had sex		Unmarried women who never had sex
			Sexually active ¹	Not sexually active ²	
Any method	96.7	98.6	97.9	97.9	82.7
Any modern method	96.6	98.5	97.9	97.7	82.7
Female sterilisation	82.7	87.1	79.9	84.1	53.3
Male sterilisation	64.0	68.7	65.3	63.4	35.1
Pill	90.1	93.9	91.7	91.8	63.0
IUD	67.7	72.6	71.1	67.9	35.2
Injectables	93.2	96.9	94.2	93.9	68.6
Implants	62.4	67.7	64.3	62.7	27.7
Male condom	89.9	92.3	90.7	91.1	72.3
Female condom	53.6	55.7	59.7	56.6	34.5
Emergency contraception	26.3	28.3	29.2	26.5	12.6
Any traditional method	64.2	70.5	64.4	63.4	24.4
Rhythm/periodic abstinence	37.3	40.1	44.1	37.6	17.1
Withdrawal	46.9	52.4	48.8	45.0	14.2
Other traditional methods	29.4	33.1	29.0	28.8	6.0
Mean number of methods known	7.8	8.3	8.1	7.9	4.6
Number of women	11,698	8,312	260	1,827	1,301

¹ Had sexual intercourse in the month preceding the survey
² Did not have sexual intercourse in the month preceding the survey

The most widely known modern methods of contraception among all women are: injectables (93 percent), pill (90 percent), male condom (90 percent), and female sterilisation (83 percent). Among women with no sexual experience, the male condom is the most widely known contraceptive method (72 percent). These findings are similar to those of the 2000 MDHS.

Table 5.1.2 shows that almost all currently married men know about fertility regulation. Even among men with no sexual experience, knowledge of any method of contraception is high (89 percent). The most widely known modern methods of contraception among men are: the male condom (96 percent of all men), injectables (85 percent), the pill (82 percent), female sterilisation (79 percent), and male sterilisation (72 percent). It is interesting to note that knowledge of female sterilisation is higher among men than knowledge of male sterilisation. This finding is similar to that of the 2000 MDHS.

Table 5.1.2 Knowledge of contraceptive method: men

Percentage of all men, of currently married men, of sexually active unmarried men, of sexually inactive unmarried men, and of men with no sexual experience who know any contraceptive method, by specific method, Malawi 2004

Method	All men	Currently married men	Unmarried men who ever had sex		Unmarried men who never had sex
			Sexually active ¹	Not sexually active ²	
Any method	97.4	98.8	97.6	98.3	89.1
Any modern method	97.4	98.8	97.6	98.3	89.1
Female sterilisation	79.3	85.9	70.9	77.0	53.9
Male sterilisation	71.5	77.4	60.6	71.8	48.1
Pill	82.1	89.5	76.1	79.0	51.5
IUD	55.9	63.5	44.7	51.9	29.4
Injectables	85.4	92.5	79.4	81.1	58.0
Implants	42.2	48.3	35.9	35.6	23.0
Male condom	95.8	97.4	95.0	97.3	85.8
Female condom	56.4	59.6	56.1	58.7	37.0
Emergency contraception	21.6	23.6	19.4	23.2	10.8
Any traditional method	55.8	64.9	48.6	47.7	23.7
Rhythm/periodic abstinence	39.8	46.3	32.5	32.9	19.7
Withdrawal	45.6	53.9	42.0	37.7	15.5
Mean number of methods known	6.8	7.4	6.1	6.5	4.3
Number of men	3,261	2,079	278	506	399

¹ Had sexual intercourse in the month preceding the survey
² Did not have sexual intercourse in the month preceding the survey

Table 5.2 shows that knowledge of at least one modern method of family planning is universally high (95 percent or more) among all subgroups of currently married women in Malawi. Young women age 15-19 have the lowest awareness of methods (95 percent). Married men with no education have marginally lower levels of knowledge of family planning methods than men with education (97 and 99-100 percent, respectively). Married men from Mangochi District are the least likely to know a modern method of fertility regulation (90 percent), while all men from Mzimba, Thyolo, and Zomba know of at least one modern method.

Table 5.2 Knowledge of contraceptive methods by background characteristics

Percentage of currently married women and men who know at least one contraceptive method and who know at least one modern method by background characteristics, Malawi 2004

Background characteristic	Women			Men		
	Knows any method	Knows any modern method ¹	Number of women	Knows any method	Knows any modern method ¹	Number of men
Age						
15-19	95.3	95.3	788	*	*	15
20-24	98.5	98.5	2,283	98.6	98.6	260
25-29	99.2	99.2	1,814	98.6	98.6	493
30-34	99.2	99.2	1,225	98.8	98.7	445
35-39	99.6	99.4	903	98.3	98.3	280
40-44	98.8	98.8	754	99.8	99.8	271
45-49	98.5	98.3	545	98.8	98.8	173
50-54	na	na	0	99.5	99.5	143
Residence						
Urban	99.3	99.3	1,337	97.7	97.7	355
Rural	98.5	98.4	6,975	99.0	99.0	1,724
Region						
Northern	99.6	99.6	1,087	100.0	100.0	243
Central	97.9	97.9	3,346	99.4	99.4	885
Southern	98.9	98.8	3,880	98.0	98.0	951
District						
Blantyre	98.0	98.0	643	99.3	99.3	199
Kasungu	98.0	97.8	385	99.7	99.7	103
Machinga	99.6	99.6	317	98.7	98.7	70
Mangochi	97.1	97.0	437	91.0	90.4	106
Mzimba	99.4	99.4	570	100.0	100.0	129
Salima	98.4	98.1	230	99.3	99.3	58
Thyolo	99.9	99.7	433	100.0	100.0	116
Zomba	99.7	99.7	436	100.0	100.0	100
Lilongwe	97.1	97.1	1,175	99.4	99.4	322
Mulanje	99.3	99.0	359	98.7	98.7	74
Other districts	98.9	98.9	3,326	98.9	98.9	802
Education						
No education	97.8	97.7	2,229	96.5	96.5	329
Primary 1-4	98.3	98.2	2,291	98.8	98.7	536
Primary 5-8	99.3	99.3	2,850	99.3	99.3	773
Secondary+	99.3	99.3	940	99.8	99.8	440
Wealth quintile						
Lowest	97.8	97.8	1,256	97.7	97.7	271
Second	98.5	98.3	1,787	98.5	98.4	434
Middle	98.2	98.1	1,851	99.2	99.2	509
Fourth	98.7	98.7	1,779	99.1	99.1	465
Highest	99.8	99.8	1,640	99.2	99.2	400
Total	98.6	98.6	8,312	98.8	98.8	2,079

Note: An asterisk indicates that an estimate is based on fewer than 25 un-weighted cases and has been suppressed.

¹ Female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, and emergency contraception.

na = Not applicable

5.2 EVER USE OF CONTRACEPTION

All women interviewed who said they had heard of a method of family planning were asked whether they had ever used that method. Table 5.3.1 shows the percentage of all women, currently married women, and sexually active women who have ever used a method of contraception. Overall, 51 percent of women report having used a method at some time and 46 percent report having ever used a modern method. Among currently married women, 60 percent have used a method in the past and 55 percent have ever used a modern method. The most widely ever used modern methods among currently married women are: injectables (41 percent), the pill (12 percent), male condom (9 percent), and female sterilisation (6 percent). Half of women who are sexually active but unmarried have used a family planning method at some time. Most of these women used a modern method (47 percent). The most frequently used modern methods among sexually active unmarried women are injectables (27 percent), the male condom (22 percent) and the pill (7 percent).

Table 5.3.1 Ever use of contraception: women

Percentage of all women, of currently married women, and of sexually active unmarried women who have ever used any contraceptive method, by specific method and age, Malawi 2004

Age	Modern method										Traditional method				Number of women		
	Any method	Any modern method	Female sterilisation	Male sterilisation	Pill	IUD	Injectables	Implants	Male condom	Female condom	Emergency contraception	Any traditional method	Rhythm/periodic abstinence	Withdrawal		Other traditional methods	
ALL WOMEN																	
15-19	15.9	14.6	0.0	0.0	1.4	0.0	6.6	0.1	7.7	0.0	0.7	0.0	3.3	0.7	2.2	0.7	2,392
20-24	50.7	46.8	0.1	0.0	6.1	0.1	35.1	0.8	12.5	0.2	2.1	0.3	10.4	2.1	6.8	2.8	2,870
25-29	64.8	60.0	1.3	0.2	13.3	0.7	49.4	1.0	10.7	0.0	3.1	0.4	14.7	3.1	8.4	5.0	2,157
30-34	65.9	62.0	6.3	0.3	14.8	0.8	50.5	1.1	6.6	0.1	3.5	0.3	15.1	3.5	7.7	6.3	1,478
35-39	65.7	59.8	12.9	0.1	16.2	1.0	44.7	0.3	6.4	0.2	3.2	0.5	17.1	3.2	7.8	8.2	1,117
40-44	64.0	55.5	17.7	0.5	16.1	1.9	33.8	1.2	4.4	0.2	3.6	0.3	21.1	3.6	10.4	10.5	935
45-49	49.1	43.1	17.0	0.5	11.6	1.9	23.6	0.1	2.5	0.0	2.8	0.0	16.0	2.8	6.3	9.2	749
Total	50.5	46.3	4.8	0.2	9.7	0.6	33.9	0.7	8.6	0.1	2.4	0.3	12.2	2.4	6.6	4.7	11,698
CURRENTLY MARRIED WOMEN																	
15-19	32.9	29.3	0.0	0.1	3.7	0.1	16.7	0.2	11.2	0.0	0.6	0.1	8.2	0.6	5.9	2.1	788
20-24	55.9	51.4	0.1	0.0	7.0	0.2	39.7	0.8	12.9	0.3	2.3	0.3	12.0	2.3	8.1	3.2	2,283
25-29	68.2	63.0	1.3	0.1	14.3	0.7	51.6	1.2	11.0	0.0	3.5	0.5	16.2	3.5	9.4	5.4	1,814
30-34	68.0	63.6	7.0	0.3	15.3	0.6	52.0	1.1	6.8	0.2	3.6	0.2	16.1	3.6	8.6	6.7	1,225
35-39	68.2	62.0	14.0	0.1	17.4	1.1	46.3	0.4	7.1	0.1	3.1	0.6	18.5	3.1	8.6	8.9	903
40-44	67.5	58.3	19.1	0.5	17.2	1.8	35.0	1.3	4.5	0.1	3.7	0.3	23.5	3.7	12.1	11.7	754
45-49	51.4	45.6	19.1	0.7	11.7	2.4	26.2	0.1	2.9	0.0	2.5	0.0	16.1	2.5	6.4	9.8	545
Total	60.3	55.0	5.8	0.2	11.9	0.7	41.3	0.8	9.4	0.1	2.8	0.3	15.2	2.8	8.5	5.9	8,312
SEXUALLY ACTIVE UNMARRIED WOMEN ¹																	
15-19	39.9	39.2	0.0	0.0	0.0	0.0	9.2	0.0	30.9	0.0	2.8	0.0	4.2	2.8	1.4	0.0	87
20-24	48.5	47.0	0.0	0.0	7.0	0.0	26.9	0.0	22.6	0.0	0.8	0.8	3.7	0.8	0.8	2.1	76
25+	59.8	54.6	3.1	0.0	14.1	1.4	43.0	0.0	14.0	0.0	2.3	1.2	11.0	2.3	2.8	7.1	97
Total	49.8	47.2	1.2	0.0	7.3	0.5	27.0	0.0	22.2	0.0	2.0	0.7	6.6	2.0	1.7	3.3	260

¹ Women who had sexual intercourse in the month preceding the survey

In the 2004 MDHS, male respondents were asked about ever use of male-oriented methods. Table 5.3.2 shows that 50 percent of men report having used a method at some time and 40 percent report having ever used a modern method. Currently married men are more likely than other men to have ever used a method; 57 percent of currently married men have used a method in the past; and 42 percent have ever used a modern method. Among all men and currently married men, the male condom is the main contraceptive method ever used (40 and 41 percent, respectively). Use of male

sterilisation is extremely low (1 percent). Among sexually active unmarried men, the male condom is virtually the only modern method of family planning ever used (65 percent).

Table 5.3.2 Ever use of contraception: men

Percentage of all men, of currently married men, and of sexually active unmarried men who have ever used any contraceptive method, by specific method and age, Malawi 2004

Age	Any method	Any modern method	Modern method		Traditional method			Number of men
			Male sterilisation	Male condom	Any traditional method	Rhythm/periodic abstinence	Withdrawal	
ALL MEN								
15-19	24.3	23.1	0.8	22.5	6.2	2.8	4.4	650
20-24	57.4	53.2	0.4	53.2	17.1	10.3	10.5	587
25-29	60.0	48.9	0.5	48.8	27.5	14.7	18.0	634
30-34	67.2	52.5	0.7	52.0	34.8	20.8	23.6	485
35-39	52.1	35.6	1.5	35.3	34.6	22.2	22.2	294
40-44	48.9	31.6	0.5	31.6	30.6	15.1	26.3	282
45-49	49.6	29.9	3.0	27.7	31.3	16.6	20.5	182
50-54	38.4	17.4	0.5	16.9	30.1	19.7	17.5	148
Total	50.3	39.9	0.8	39.5	23.7	13.5	16.0	3,261
CURRENTLY MARRIED MEN								
15-19	40.6	29.7	0.0	29.7	10.9	10.9	10.9	15
20-24	57.4	49.8	0.0	49.8	25.0	15.7	16.3	260
25-29	61.1	47.8	0.4	47.7	32.1	17.1	21.2	493
30-34	67.6	51.9	0.8	51.4	36.2	21.5	24.8	445
35-39	52.7	35.4	1.6	35.2	34.8	22.3	22.2	280
40-44	49.3	31.7	0.6	31.7	31.2	15.7	26.6	271
45-49	49.7	31.1	3.1	28.8	30.7	15.9	20.4	173
50-54	39.1	18.0	0.5	17.5	30.5	19.9	17.9	143
Total	56.8	41.6	0.8	41.2	32.0	18.4	21.8	2,079
SEXUALLY ACTIVE UNMARRIED MEN ¹								
15-19	54.3	51.6	1.0	51.1	18.7	6.4	16.6	119
20-24	84.4	83.1	0.0	83.1	17.4	11.3	8.6	102
25+	70.0	63.0	0.0	63.0	25.7	14.3	15.5	57
Total	68.6	65.5	0.4	65.3	19.6	9.8	13.4	278

¹ Men who had sexual intercourse in the month preceding the survey

5.3 CURRENT USE OF CONTRACEPTIVE METHODS

In the 2004 MDHS, women were asked about the contraceptive method they were currently using. Table 5.4 shows the percent distribution of women who are currently using specific family planning methods by age. The survey shows that 26 percent of all women and 33 percent of currently married women are using a method of family planning. Twenty-eight percent of all currently married women are using a modern method of contraception. This is a marginal increase over the 26 percent reported in the 2000 MDHS.

Current use of modern contraceptive methods among currently married women increases with age, from 17 percent for women age 15-19 to 33 percent for married women age 40-44 years, and then drops to 27 percent for those age 45-49. Injectables, female sterilisation, and the pill are the most commonly used contraceptive methods, used by 18, 6, and 2 percent of married women,

respectively. The choice of methods among sexually active unmarried women is different; these women prefer to use injectables (11 percent) and male condoms (10 percent).

Table 5.4 Current use of contraception

Percent distribution of all women, of currently married women, and of sexually active unmarried women by contraceptive method currently used, according to age, Malawi 2004

Age	Modern method								Traditional method					Total	Number of women
	Any method	Any modern method	Female sterilisation	Pill	IUD	Injectables	Implants	Male condom	Any traditional method	Rhythm/periodic abstinence	Withdrawal	Other traditional methods	Not currently using		
ALL WOMEN															
15-19	8.5	7.6	0.0	0.5	0.0	4.6	0.0	2.6	0.8	0.1	0.4	0.3	91.5	100.0	2,392
20-24	25.6	22.5	0.1	1.4	0.1	17.5	0.5	3.0	3.1	0.4	1.8	0.9	74.4	100.0	2,870
25-29	32.0	27.8	1.3	2.3	0.1	21.9	0.6	1.6	4.1	0.7	2.2	1.2	68.0	100.0	2,157
30-34	32.1	28.6	6.3	2.3	0.1	18.4	0.8	0.7	3.5	0.5	1.7	1.3	67.9	100.0	1,478
35-39	32.8	28.6	12.9	2.0	0.1	12.9	0.1	0.5	4.1	0.3	1.7	2.1	67.2	100.0	1,117
40-44	35.0	29.7	17.7	0.9	0.1	10.2	0.3	0.5	5.2	0.3	1.9	3.1	65.0	100.0	935
45-49	28.2	22.9	17.0	1.1	0.1	4.2	0.0	0.2	5.3	0.7	1.0	3.6	71.8	100.0	749
Total	25.7	22.4	4.8	1.5	0.1	13.9	0.4	1.7	3.3	0.4	1.5	1.3	74.3	100.0	11,698
CURRENTLY MARRIED WOMEN															
15-19	18.9	16.6	0.0	1.3	0.0	11.8	0.1	3.4	2.3	0.0	1.4	1.0	81.1	100.0	788
20-24	29.2	25.4	0.1	1.5	0.1	20.2	0.4	3.0	3.7	0.5	2.2	1.1	70.8	100.0	2,283
25-29	35.3	30.8	1.3	2.7	0.1	24.3	0.7	1.6	4.6	0.7	2.6	1.2	64.7	100.0	1,814
30-34	35.5	31.6	7.0	2.7	0.1	20.1	0.9	0.7	3.9	0.5	2.0	1.4	64.5	100.0	1,225
35-39	36.7	31.8	14.0	2.3	0.2	14.5	0.2	0.6	4.8	0.4	2.2	2.3	63.3	100.0	903
40-44	39.5	33.3	19.1	1.1	0.1	12.1	0.4	0.6	6.2	0.2	2.3	3.6	60.5	100.0	754
45-49	33.0	26.7	19.1	1.1	0.2	5.7	0.0	0.2	6.3	0.6	1.4	4.3	67.0	100.0	545
Total	32.5	28.1	5.8	2.0	0.1	18.0	0.5	1.8	4.3	0.5	2.1	1.7	67.5	100.0	8,312
SEXUALLY ACTIVE UNMARRIED WOMEN ¹															
15-19	25.0	23.5	0.0	0.0	0.0	9.2	0.0	14.3	1.5	1.5	0.0	0.0	75.0	100.0	87
20-24	28.2	27.0	0.0	4.8	0.0	10.4	0.0	11.9	1.2	0.0	0.0	1.2	71.8	100.0	76
25+	25.9	22.9	3.1	1.8	0.0	14.1	0.0	3.9	3.0	0.0	0.0	3.0	74.1	100.0	97
Total	26.3	24.3	1.2	2.0	0.0	11.4	0.0	9.7	2.0	0.5	0.0	1.5	73.7	100.0	260

Note: If more than one method is used, only the most effective method is considered in this tabulation.

¹Women who have had sexual intercourse in the month preceding the survey

As expected, female sterilisation is used more commonly by women age 35 and older, while injectables are mostly used by women at the peak of childbearing years (age 20-39) and male condoms are used by women age 15-24.

5.4 CURRENT USE OF CONTRACEPTION BY BACKGROUND CHARACTERISTICS

Table 5.5 presents the percent distribution of currently married women by their current use of contraceptive methods according to background characteristics. Married women in urban areas are more likely to use modern contraceptives (35 percent) than rural women (27 percent), while rural women are more likely than urban women to use traditional methods (5 percent compared with 3 percent). While women in the Northern Region show the highest overall use of family planning methods (41 percent), a large proportion of these women use traditional methods (13 percent). In the Northern Region, married women are much more likely to use male condoms than women in other regions (7 percent compared with 1 percent or less).

(22 percent or higher), while female sterilisation is popular in Lilongwe and Mulanje (7 percent or higher).

5.5 TRENDS IN CONTRACEPTIVE USE

Table 5.6 shows that while the proportion of currently married women using any method of family planning increased greatly from 13 percent in 1992 to 31 percent in 2000, there is a slight increase from 31 percent in 2000 to 33 percent in 2004. Use of modern contraceptive methods increased fourfold from 7 percent in 1992 to 28 percent in 2004. This dramatic rise in use of modern methods can be attributed to a sharp increase in the use of injectables and female sterilisation. Use of male condoms remains unchanged at 2 percent.

Method	1992 MDHS	2000 MDHS	2004 MDHS
Any method	13.0	30.6	32.5
Any modern method	7.4	26.1	28.1
Female sterilisation	1.7	4.7	5.8
Male sterilisation	0.0	0.1	0.0
Pill	2.2	2.7	2.0
IUD	0.3	0.1	0.1
Injectables	1.5	16.4	18.0
Implants	na	0.1	0.5
Male condom	1.6	1.6	1.8
Any traditional method	5.6	4.5	4.3
Rhythm/periodic abstinence	2.2	0.9	0.5
Withdrawal	1.5	1.5	2.1
Other traditional methods	2.0	2.1	1.7
Number of women	3,492	9,452	8,312

5.6 CURRENT USE OF CONTRACEPTION BY WOMAN'S STATUS

A woman's status and her self-image affect, to some extent, her desire and ability to control her fertility and her choice of contraceptive method. A woman who is not empowered to make decisions generally affecting her life is less likely to make decisions relating to her reproductive rights and responsibilities. Table 5.7 shows the distribution of currently married women by contraceptive use, according to selected indicators of women's status. Use of a modern method of contraception is reported by 24 percent of women who have a final say in no decisions, 28 percent of women with a final say in 1-2 decisions, and at least 30 percent of women with a final say in three or more decisions. There is a small positive trend in the proportion of women using modern methods of contraception relative to the number of reported reasons to refuse sexual relations with the husband, and a small negative relationship with agreement with reported reasons to justify wife beating. This table shows that these indicators of women's status have a weak but consistent relationship with the use of contraceptive methods in Malawi: women with more decisionmaking power and women who believe that a wife has the right to refuse sex to her husband and that wife beating is not justified are slightly more likely to use a modern method of contraception.

Table 5.7 Current use of contraception by women's status

Percent distribution of currently married women by contraceptive method currently used, according to indicators of women's status, Malawi 2004

Women's status indicators	Modern method								Traditional method				Not currently using	Total	Number of women
	Any method	Any modern method	Female sterilisation	Pill	IUD	Injectables	Implants	Male condom	Any traditional method	Rhythm/periodic abstinence	Withdrawal	Other traditional methods			
Number of decisions in which woman has final say¹															
0	26.3	23.6	3.7	1.6	0.2	16.1	0.2	1.9	2.8	0.3	0.9	1.7	73.7	100.0	1,390
1-2	32.3	27.6	6.0	1.9	0.1	17.1	0.4	2.1	4.7	0.6	2.5	1.6	67.7	100.0	4,040
3-4	36.5	31.9	6.6	2.1	0.2	20.7	0.9	1.2	4.7	0.4	2.7	1.6	63.5	100.0	1,879
5	34.1	30.0	7.1	2.4	0.1	19.0	0.3	1.1	4.2	0.2	1.4	2.5	65.9	100.0	1,004
Number of reasons to refuse sex with husband															
0	27.9	24.7	5.3	1.9	0.1	16.0	0.0	1.4	3.2	0.5	1.2	1.5	72.1	100.0	857
1-2	29.9	26.2	4.5	1.8	0.0	18.4	0.2	1.4	3.6	0.3	1.6	1.7	70.1	100.0	1,556
3-4	33.8	29.2	6.3	2.0	0.2	18.1	0.6	1.9	4.7	0.5	2.4	1.8	66.2	100.0	5,900
Number of reasons wife beating is justified															
0	32.6	28.7	6.5	2.0	0.2	18.1	0.5	1.5	3.9	0.4	1.8	1.7	67.4	100.0	5,886
1-2	32.4	27.1	4.8	1.7	0.1	17.7	0.7	2.2	5.3	0.7	2.3	2.3	67.6	100.0	1,446
3-4	33.0	26.9	3.7	2.6	0.0	17.0	0.1	3.5	6.1	0.3	4.3	1.5	67.0	100.0	648
5	29.7	25.8	4.0	1.1	0.0	19.0	0.2	1.4	3.9	0.2	3.2	0.5	70.3	100.0	333
Total	32.5	28.1	5.8	2.0	0.1	18.0	0.5	1.8	4.3	0.5	2.1	1.7	67.5	100.0	8,312

Note: If more than one method is used, only the most effective method is considered in this tabulation.

¹ Either by herself or jointly with others.

5.7 NUMBER OF CHILDREN AT FIRST USE OF CONTRACEPTION

The reason to practice family planning may be either to limit family size or to postpone the next birth. Couples using family planning to stop having any more children start using this when they have already had the number of children they desire. When family planning is used to delay the timing of pregnancy, couples may use contraception earlier in their reproductive lives. This may be done before a couple has had the number of children they desire, indeed even before the first pregnancy. Table 5.8 shows that 37 percent of young women age 15-19 who have ever used contraception started using contraceptives before they have had their first child. This compares with less than 1 percent of women age 35 years and over. While the vast majority of women age 20-29 start using a family planning method after the birth of their first child, 53-70 percent of women age 35 years and older start using contraceptive methods after they have had four or more children.

Current age	Number of living children at time of first use of contraception						Total	Number of women
	0	1	2	3	4+	Missing		
15-19	36.8	55.2	6.5	0.0	0.8	0.6	100.0	380
20-24	8.8	61.5	24.3	4.7	0.6	0.1	100.0	1,454
25-29	2.6	41.5	33.5	15.0	7.4	0.2	100.0	1,398
30-34	1.6	22.8	27.7	22.2	25.6	0.1	100.0	975
35-39	0.7	15.0	15.6	16.0	52.6	0.1	100.0	733
40-44	0.1	15.3	10.4	10.8	62.9	0.5	100.0	598
45-49	0.9	12.0	8.0	9.0	70.0	0.0	100.0	368
Total	5.6	36.4	22.4	12.0	23.4	0.2	100.0	5,907

5.8 KNOWLEDGE OF FERTILE PERIOD

Knowledge of the fertile period is important to assess the likelihood of conception in the absence of any use of contraception. This is especially important for couples that use periodic abstinence to prevent pregnancy. Table 5.9 shows the percent distributions of women and men by knowledge of the fertile period during the ovulatory cycle.

Table 5.9 shows that knowledge of the fertile period is generally low among women. Only 16 percent of women think that their fertile period falls halfway between two periods. This proportion is even lower (6 percent) for women who report that they use periodic abstinence as a contraceptive method. The majority of all women (35 percent) think that their fertile period is right after their period has ended. Seventeen percent of all women report that they do not know their fertile period.

Table 5.9 also shows that one in four men (26 percent) report that they do not know when a woman's fertile period is, and another quarter (26 percent) believe that the fertile period is the time right after the monthly period has ended. Yet another 25 percent think the fertile period is just before the period begins. Only 10 percent of men know that a woman's fertile period is about halfway between two periods.

Table 5.9 Knowledge of fertile period

Percent distribution of women and men by knowledge of the fertile period during the ovulatory cycle, according to current use/nonuse of periodic abstinence, Malawi 2004

Perceived fertile period	Women		All women	All men
	Users of periodic abstinence	Nonusers of periodic abstinence		
Just before her period begins	(6.7)	15.4	15.3	24.6
During her period	(1.3)	3.8	3.8	2.2
Right after her period has ended	(67.6)	34.9	35.0	25.7
Halfway between two periods	(5.5)	15.9	15.8	9.9
Other	(0.0)	0.1	0.1	0.1
No specific time	(10.7)	13.0	13.0	11.1
Don't know	(8.2)	16.9	16.8	26.4
Missing	(0.0)	0.1	0.1	0.0
Total	100.0	100.0	100.0	100.0
Number of respondents	47	11,651	11,698	3,261

Note: Figures in parentheses are based on 25-49 unweighted cases.

These findings indicate that use of periodic abstinence is not a reliable method of contraception among the couples using this method, because knowledge of the fertile period is very limited among both men and women in Malawi.

5.9 TIMING OF STERILISATION

Table 5.10 shows that most women who are sterilised have the operation between the ages of 30 and 39 (58 percent). This proportion is about the same as that for women in the 2000 MDHS. There is a decrease in the proportion of women reporting to have been sterilised before age 25, from 7 percent in 2000 to 4 percent in 2004; there is also a decrease from 7 percent to 3 percent for women age 45-49 in the same period.

Table 5.10 Timing of sterilisation

Percent distribution of sterilised women by age at the time of sterilisation, and median age at sterilisation, according to the number of years since the operation, Malawi 2004

Years since operation	Age at time of sterilisation						Total	Number of women	Median age ¹
	<25	25-29	30-34	35-39	40-44	45-49			
<2	3.1	17.4	24.4	26.2	22.6	6.4	100.0	179	33.5
2-3	1.6	14.2	28.7	31.4	20.7	3.3	100.0	101	33.9
4-5	3.0	19.6	22.6	31.5	23.3	0.0	100.0	91	33.6
6-7	6.1	12.9	33.6	38.5	8.8	0.0	100.0	78	34.0
8-9	2.0	11.5	42.8	42.6	1.1	0.0	100.0	33	34.5
10+	8.1	42.7	27.3	21.8	0.0	0.0	100.0	79	a
Total	3.9	19.8	27.7	30.1	16.0	2.6	100.0	561	33.4

a = Not calculated due to censoring

¹ Median age is calculated only for women sterilised at less than 40 years of age to avoid problems of censoring.

5.10 SOURCE OF CONTRACEPTION

All current users of modern contraceptives were asked about the most recent source of their methods. Table 5.11 shows that the public sector is the main source of contraceptive methods in Malawi, providing methods to 67 percent of current users. This is about the same proportion captured in the 2000 MDHS (68 percent). Thirteen percent of all current users get their methods from Mission (religious) facilities, 4 percent from the private medical sector, and 17 percent from other sources including NGOs, where Banja La Mtsogola (BLM) is the most commonly used source (13 percent). In the public sector, 40 percent of current users obtain their contraceptive methods from government health centres and 20 percent from government hospitals. Four percent and 2 percent of users obtain their methods from mobile clinics and fieldworkers, respectively.

Table 5.11 Source of contraception

Percent distribution of women who are currently using modern contraceptive methods by most recent source of method, according to specific method, Malawi 2004

Source of supply	Female sterilisation	Pill	Injectables	Implants	Male condom	Total
Public	39.4	72.9	77.9	(66.6)	45.4	66.5
Government hospital	34.6	14.6	15.9	(58.7)	8.8	20.0
Government health centre	4.6	44.8	55.1	(7.9)	21.1	40.0
Family planning clinic	0.1	0.0	0.9	(0.0)	0.0	0.6
Mobile clinic	0.0	2.7	4.8	(0.0)	6.8	3.7
Field worker	0.0	10.4	0.9	(0.0)	7.9	2.0
Other public	0.0	0.3	0.4	(0.0)	0.8	0.3
Mission	17.4	11.5	11.1	(33.4)	8.6	12.6
Mission hospital, clinic	16.0	6.1	5.1	(26.0)	2.3	7.6
Mission health centre	1.4	4.6	5.3	(7.4)	5.0	4.4
Mobile clinic	0.0	0.8	0.7	(0.0)	1.3	0.6
Private	0.9	5.4	5.4	(0.0)	3.2	4.2
Private hospital/clinic	0.9	1.1	4.6	(0.0)	0.5	3.2
Pharmacy	0.0	0.0	0.0	(0.0)	0.3	0.0
Private doctor	0.0	0.4	0.2	(0.0)	0.0	0.1
Mobile clinic	0.0	1.5	0.1	(0.0)	0.0	0.2
CBDA/fieldworker	0.0	2.3	0.5	(0.0)	2.4	0.7
other private medical	0.0	0.0	0.0	(0.0)	0.0	0.0
Other	42.3	9.6	5.5	(0.0)	41.8	16.5
BLM	42.3	8.6	5.3	(0.0)	1.4	13.2
Shop	0.0	1.0	0.0	(0.0)	38.9	3.1
Friend/relative	0.0	0.0	0.1	(0.0)	1.5	0.2
Other	0.0	0.0	0.0	(0.0)	1.0	0.1
Missing	0.0	0.6	0.0	(0.0)	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	561	176	1,625	43	203	2,620

Note: Total includes some women whose husband/partner has been sterilised and some women who use the IUD. Figures in parentheses are based on 25-49 unweighted cases.

Among mission health facilities, mission hospitals are the most commonly used source, providing contraceptives to 8 percent of all users of modern methods. Mission health centres provide contraceptives to 4 percent of all current users. The private medical sector is the source of contraceptive methods to only 4 percent of all users of modern methods of contraception.

Female sterilisations are conducted mainly in BLM (42 percent) and government hospitals (35 percent). The pill is obtained mainly from government health centres (45 percent) and government hospitals (15 percent). Injectables are also supplied primarily in government health centres (55 percent) and government hospitals (16 percent).

Male condoms are obtained mainly from shops (39 percent), government health centres (21 percent), and government hospitals (9 percent). Overall, these results reaffirm the reliance on government health facilities for the provision of contraceptive services in Malawi. These are complemented by services provided by BLM and mission health institutions.

5.11 INFORMED CHOICE

Current users of modern methods who are well informed about the side effects and problems associated with methods and know of a range of method options are in a better position to make an informed choice about the method they would like to use. Providers of family planning services must inform potential clients about the various methods available, their effectiveness in preventing pregnancy, and their potential side effects. Prior to administering a sterilisation operation, providers must inform potential users that the operation is a permanent and irreversible method. Knowledge of various methods also helps minimise discontinuation rates.

In the 2004 MDHS, current users of various modern contraceptive methods were asked whether at the time they were adopting the particular method, they were informed about side effects or problems that they might have with the method. Table 5.12 shows the percentage of current users of modern methods who were informed about side effects or problems of the method used, informed of other methods they could use, and informed that sterilisation is a permanent method; these are presented by method type, initial source, and various background characteristics.

Table 5.12 shows that 77 percent of users of modern contraceptive methods were informed about side effects of the method they use, 74 percent were told what to do in case of side effects, and 76 percent say that they were told about other contraceptive options. Table 5.12 also shows that virtually all (97 percent) of sterilized women were informed that the operation is permanent and that they would not be able to have any more children after the operation.

Table 5.12 Informed choice

Among current users of modern contraceptive methods who adopted the current method in the five years preceding the survey, percentage who were informed about the side effects of the method used, percentage who were informed what to do if side effects were experienced, percentage who were informed of other methods that could be used for contraception, and percentage of women who were sterilised in the five years preceding the survey who were informed that they would not be able to have any more children, by specific method, initial source of method, and background characteristics, Malawi 2004

Method/source/ background characteristic	Informed about side effects or problems of method used ¹	Informed what to do if experienced side effects ¹	Informed of other methods that could be used ²	Informed that sterilisation is permanent ³
Method				
Female sterilisation	73.0	72.8	58.8	96.7
Pill	74.8	74.4	77.3	na
Injectables	100.0	100.0	100.0	na
Implants	77.6	74.2	79.4	na
Initial source of method⁴	83.6	88.1	94.4	na
Public sector	76.5	72.6	76.8	98.0
Government hospital	76.6	75.0	73.5	97.6
Government health center	76.6	72.5	78.4	100.0
Family planning clinic	84.9	43.8	72.7	100.0
Mobile clinic	76.6	71.8	78.1	na
CBD/fieldworker	70.9	62.4	69.1	na
Private medical sector	79.7	80.2	78.6	89.9
Private doctor	80.9	80.1	84.1	88.4
Private hospital or clinic	77.9	79.2	70.4	100.0
Pharmacy	80.4	90.2	82.9	na
Other private sector	78.3	92.3	89.5	na
Residence				
Urban	80.8	77.5	79.3	96.5
Rural	75.9	73.6	75.5	96.7
Region				
Northern	84.5	80.7	81.3	95.5
Central	75.6	73.2	74.4	98.2
Southern	76.3	74.0	76.8	95.0
Education				
No education	75.0	72.7	69.7	96.8
Primary 1-4	74.0	71.3	73.2	97.7
Primary 5-8	80.5	78.2	81.7	96.0
Secondary+	75.9	72.9	77.9	96.1
Wealth quintile				
Lowest	77.0	71.4	72.5	98.8
Second	76.2	75.8	80.7	96.5
Middle	77.5	73.6	75.8	94.0
Fourth	74.1	72.3	71.1	99.1
Highest	79.2	77.3	80.0	95.5
Total	76.9	74.4	76.3	96.7

na = Not applicable

¹ Among users of female sterilisation, pill, IUD, injectables and implants

² Among users of female sterilisation, pill, IUD, injectables, implants, and female condom

³ Sterilised women who were told that they would not be able to have any more children

⁴ Source at start of current episode of use

5.12 CONTRACEPTIVE DISCONTINUATION

Correct and continuous use of contraceptive methods helps couples to realise their reproductive goals. A major concern for managers of family planning programmes is the discontinuation of methods. The “calendar” section in the 2004 MDHS Women’s Questionnaire is used to record all births, pregnancies and pregnancy terminations, as well as all segments of contraceptive use between January 2000 and the date of interview, along with reasons for any

discontinuation. One-year contraceptive discontinuation rates based on these data are presented in Table 5.13.¹

Table 5.13 shows that 36 percent of contraceptive users in Malawi discontinue use of the method within 12 months after of starting its use. Eight percent of users report that they stopped because they wanted to become pregnant, 4 percent switched to another method, and 3 percent stopped using because of unintended pregnancy (method failure). Twenty percent of users gave various other reasons for discontinuing.

Discontinuation rates are highest for condom users (62 percent) and pill users (52 percent). Users of injectables are least likely to discontinue use within 12 months of use (33 percent). Condom users are the most likely to switch to another method, while method failure is highest for other methods and users of withdrawal.

Table 5.13 First-year contraceptive discontinuation rates

Percentage of contraceptive users who discontinued use of a method within 12 months after beginning its use, by reason for discontinuation and specific method, Malawi 2004

Method	Reason for discontinuation				Total
	Method failure	Desire to become pregnant	Switched to another method ¹	Other reason	
Pill	6.8	9.5	8.0	28.1	52.3
Injectables	1.4	7.6	1.8	21.8	32.5
Male condom	2.3	14.8	11.6	33.2	61.9
Withdrawal	10.1	10.9	8.1	11.0	40.1
Other	13.4	8.4	2.0	12.8	36.6
All methods	3.3	8.4	3.7	20.3	35.8

Note: Table is based on episodes of contraceptive use that began 3-59 months prior to the survey.
¹Used a different method in the month following discontinuation or said they wanted a more effective method and started another method within two months of discontinuation

Table 5.14 presents reasons for discontinuation of the 3,808 contraceptive discontinuations occurring in the five years preceding the survey, distributed by the main reason for discontinuation, according to method. The most prominent reason for discontinuation is the desire to become pregnant (35 percent), followed by side effects of the method (18 percent). Injectables and pills are the methods that contribute most to discontinuation because of side effects. Users of the pill and injectables are by far the most likely to cite and health concerns (8-9 percent). It is interesting to note that 11 percent of pill users stopped using the pill because they became pregnant.

Overall, method failure is reported in 10 percent of the discontinuations. This reason is cited more frequently for discontinuations of traditional methods such as periodic abstinence or withdrawal (19 and 27 percent, respectively). Lack of access or lack of availability of the methods is not seen as a major problem for discontinuing use, cited in only 3 percent of discontinuations.

¹ The discontinuation rates presented here include only those segments of contraceptive use that began since January 1999. The rates apply to the 3-63 month period prior to the survey; exposure during the month of interview and the two months prior are excluded to avoid the biases that may be introduced by unrecognised pregnancies. These cumulative discontinuation rates represent the proportion of users discontinuing a method within 12 months after the start of use. The rates are calculated by dividing the number of women discontinuing a method by the number exposed at that duration. The single-month rates are then cumulated to produce a one-year rate. In calculating the rate, the various reasons for discontinuation are treated as competing risks.

Table 5.14 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason for discontinuation, according to specific method, Malawi 2004

Reason	Contraceptive Method						
	Pill	Injectables	Condom	Periodic abstinence	Withdrawal	Other	All methods
Became pregnant while using	10.8	4.6	5.6	19.3	26.8	35.6	9.9
Wanted to become pregnant	29.1	36.0	29.9	49.7	40.4	33.8	35.2
Husband disapproved	2.4	2.5	11.2	2.2	5.6	2.7	3.7
Side effects	25.4	25.4	1.6	2.7	0.4	1.4	18.3
Health concerns	8.4	9.3	0.0	0.0	0.0	1.5	6.6
Access/availability	3.5	3.8	3.8	0.0	0.0	1.5	3.2
Wanted a more effective method	3.3	1.5	7.7	5.9	9.7	5.3	3.6
Inconvenient to use	3.0	0.9	9.1	0.0	5.2	3.4	2.6
Infrequent sex/husband away	3.7	3.0	11.0	2.5	3.4	1.0	3.8
Cost too much	0.1	0.1	1.8	0.0	0.0	0.0	0.2
Fatalistic	0.5	0.0	0.3	0.0	0.0	0.5	0.1
Difficult to get pregnant/menopausal	0.5	0.5	0.0	1.5	0.7	0.6	0.5
Marital dissolution/separation	1.2	2.8	5.1	2.2	1.8	1.2	2.6
Other	4.4	4.2	5.3	11.8	1.3	4.3	4.2
Don't know	0.5	0.3	0.6	0.0	0.1	0.2	0.3
Missing	3.1	5.2	6.9	2.3	4.6	7.1	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	426	2,247	395	73	419	221	3,808

Note: Total includes 2 discontinuations reported by women whose husband/partners were sterilised, 8 by women who used the IUD, 13 by women who used implants, and one by a woman who used the female condom.

5.13 FUTURE USE OF CONTRACEPTION

Demand for specific methods is assessed in the 2004 MDHS by asking nonusers which method they intend to use in the future. Table 5.15 presents the findings. Among married women who are not using contraception at the time of the survey, 74 percent report that they intend to adopt a family planning method in the future, 23 percent say they do not intend to use any method, and 4 percent are not sure of their intention. There are no major differences in the percentage of women who intend to use family planning according to their number of living children.

Table 5.15 Future use of contraception

Percent distribution of currently married women who are not using a contraceptive method by intention to use in the future, according to number of living children, Malawi 2004

Intention	Number of living children ¹					Total
	0	1	2	3	4+	
Intends to use	67.1	77.6	76.8	77.2	68.5	73.6
Unsure	7.5	4.0	3.6	2.3	3.0	3.6
Does not intend to use	24.7	18.3	19.3	20.1	28.0	22.5
Missing	0.7	0.1	0.3	0.4	0.4	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	423	1,239	1,164	935	1,852	5,613

¹ Includes current pregnancy

5.14 REASONS FOR NOT INTENDING TO USE CONTRACEPTION

Table 5.16 presents the main reasons why currently married women who are not using any contraceptive method do not intend to use one in the future. Among women under 30 years of age, the main reasons reported for not intending to use a contraceptive method are method-related (49 percent). Fear of side effects (29 percent), health concerns (12 percent), the woman's own opposition to the use of any contraceptive (11 percent), and the desire to have as many children as possible (11 percent) are reported as the specific reasons for not intending to use any family planning method.

Reason	Age		Total
	15-29	30-49	
Fertility-related reasons	19.2	51.3	39.1
Infrequent sex/no sex	2.1	6.9	5.1
Menopausal/had hysterectomy	0.2	17.0	10.6
Subfecund/infecund	6.1	19.0	14.1
Wants as many children as possible	10.8	8.4	9.3
Opposition to use	20.7	13.4	16.2
Respondent opposed	10.5	5.8	7.6
Husband/partner opposed	7.0	4.0	5.1
Others opposed	0.1	0.4	0.2
Religious prohibition	3.1	3.3	3.2
Lack of knowledge	2.1	0.9	1.4
Knows no method	1.8	0.7	1.2
Knows no source	0.2	0.2	0.2
Method-related reasons	49.2	30.6	37.7
Health concerns	11.9	9.3	10.3
Fear of side effects	28.8	15.6	20.6
Lack of access/too far	1.9	0.4	1.0
Costs too much	0.3	0.1	0.2
Inconvenient to use	1.9	0.9	1.3
Interfere with body's normal processes	4.4	4.2	4.3
Other	2.9	2.8	2.8
Don't know	5.2	1.0	2.6
Missing	0.7	0.0	0.3
Total	100.0	100.0	100.0
Number of women	480	783	1,264

For women 30 years of age and older, the reasons for not intending to adopt family planning are largely fertility-related. Infertility (19 percent), menopause/hysterectomy (17 percent), fear of side effects (16 percent), and health concerns (9 percent) are the most frequently specified reasons for not adopting a contraceptive method.

5.15 PREFERRED METHOD OF CONTRACEPTION FOR FUTURE USE

Currently married women who are not using a contraceptive method but intend to adopt family planning were asked about contraceptive methods they prefer to use in the future. Table 5.17 shows that the majority of currently married women who are not currently using a contraceptive method intend in the future to use injectables (59 percent) as a family planning method. This preference is the same as that expressed in the 2000 MDHS survey (59 percent). Fourteen percent of women intend to use female sterilisation as a method in the future, while only 11 percent of the women intend to use the pill as a family planning method. Injectables are more popular among younger women, while women age 30-49 are more likely than younger women to say that they intend to use sterilisation.

Method	Age		Total
	15-29	30-49	
Female sterilisation	5.4	31.8	13.8
Male sterilisation	0.1	0.4	0.2
Pill	11.8	9.0	10.9
IUD	1.2	0.8	1.1
Injectables	65.7	45.0	59.1
Implants	2.9	2.5	2.8
Condom	4.5	2.8	4.0
Female condom	0.1	0.0	0.1
Rhythm/periodic abstinence	0.7	1.4	0.9
Withdrawal	1.1	0.7	0.9
Other	3.0	3.7	3.2
Unsure	3.4	2.0	2.9
Total	100.0	100.0	100.0
Number of women	2,814	1,317	4,131

5.16 EXPOSURE TO FAMILY PLANNING MESSAGES THROUGH THE MEDIA

Radio, television and print media, namely newspapers and magazines, are potential media for disseminating family planning information. Television is still not widespread in Malawi.

In the 2004 MDHS, women and men were asked whether they heard or saw a family planning message on the radio, television, or in a newspaper or magazine. The results are shown in Tables 5.18.1 and 5.18.2.

Table 5.18.1 shows that the majority of women (67 percent) have heard a family planning message recently on the radio. Fourteen percent are reached by newspaper/magazine and only 8 percent by television. Thirty-two percent of the women are not reached by any of the three media sources.

Rural women are much less exposed to television than their urban counterparts (4 percent compared with 26 percent). Women in the Northern Region are more likely to have been exposed to each of the three types of media than those in the other regions. A woman's education is positively related to her exposure to family planning messages through the media. For example, 44 percent of

women with no education have not been exposed to family planning information through the media, compared with only 16 percent of women with secondary or higher education. While overall, 32 percent of all women have had no exposure to family planning messages through the media, only 22 percent of women in Blantyre District have had no such exposure.

Table 5.18.2 shows that exposure to family planning messages through the media is greater among men than it is among women. Eighteen percent of men have no exposure to those messages through the media, compared with 32 percent of women. The same pattern of differentials in exposure to family planning messages exists among men with respect to place of residence, education, and wealth status, but differences are less pronounced than for women.

Background characteristic	Radio	Television	Newspaper/ magazine	None of these three media sources	Number of women
Age					
15-19	58.5	8.0	15.5	39.5	2,392
20-24	69.9	8.5	16.3	29.3	2,870
25-29	71.9	9.8	14.0	27.1	2,157
30-34	68.1	6.1	11.0	31.3	1,478
35-39	71.3	8.8	12.8	28.2	1,117
40-44	68.2	6.8	11.2	31.2	935
45-49	63.3	6.5	8.2	36.6	749
Residence					
Urban	77.6	25.7	30.8	20.4	2,076
Rural	65.0	4.3	10.1	34.2	9,621
Region					
Northern	72.4	10.8	19.9	25.9	1,552
Central	63.6	7.4	12.5	35.8	4,734
Southern	69.0	7.9	13.2	29.9	5,412
District					
Blantyre	76.1	19.0	27.3	21.8	914
Kasungu	66.4	4.9	11.4	33.2	497
Machinga	66.1	5.7	11.1	33.2	427
Mangochi	65.2	7.5	10.8	33.7	599
Mzimba	70.9	9.1	15.9	27.8	778
Salima	69.7	4.9	9.2	30.2	303
Thyolo	70.1	3.7	11.2	29.0	618
Zomba	67.4	9.9	13.8	31.6	637
Lilongwe	63.0	13.6	17.3	36.4	1,705
Mulanje	67.7	5.7	13.1	31.1	512
Other districts	66.4	5.2	11.1	32.7	4,708
Education					
No education	56.0	2.4	3.2	43.8	2,734
Primary 1-4	63.3	2.5	5.3	36.4	2,998
Primary 5-8	71.5	6.8	14.2	27.2	4,154
Secondary+	81.1	28.8	42.9	16.4	1,811
Wealth quintile					
Lowest	42.1	1.4	4.4	57.3	2,037
Second	62.7	2.2	7.0	36.9	2,277
Middle	69.7	2.4	7.4	29.5	2,383
Fourth	74.9	3.6	11.6	24.4	2,361
Highest	81.7	27.5	34.5	16.2	2,639
Total	67.3	8.1	13.8	31.8	11,698

Table 5.18.2 Exposure to family planning messages: men

Percentage of men who heard or saw a family planning message on the radio or television, or in a newspaper/magazine in the past few months, according to background characteristics, Malawi 2004

Background characteristic	Radio	Television	Newspaper/ magazine	None of these three media sources	Number of men
Age					
15-19	68.6	15.5	26.6	28.6	650
20-24	79.0	19.3	36.0	18.4	587
25-29	82.8	14.3	35.0	15.3	634
30-34	85.9	19.2	34.6	13.2	485
35-39	84.7	13.1	33.1	13.3	294
40-44	89.0	12.0	33.7	11.0	282
45-49	85.5	8.8	22.6	14.2	182
50-54	79.8	6.8	21.8	19.8	148
Residence					
Urban	84.2	35.9	50.0	12.3	669
Rural	79.5	9.8	27.2	19.2	2,593
Region					
Northern	84.1	19.5	29.9	15.0	423
Central	79.4	17.6	32.9	18.5	1,370
Southern	80.5	11.7	31.5	18.0	1,468
District					
Blantyre	84.2	13.4	25.3	13.8	316
Kasungu	82.5	15.5	33.0	17.2	156
Machinga	86.4	20.3	49.6	11.9	114
Mangochi	69.9	9.6	19.1	28.7	150
Mzimba	86.5	19.3	27.0	12.9	212
Salima	78.5	6.7	27.0	17.3	78
Thyolo	80.2	6.8	26.1	17.5	169
Zomba	86.6	19.4	27.8	13.0	159
Lilongwe	78.4	30.4	41.2	18.5	542
Mulanje	80.7	11.5	34.0	18.4	114
Other districts	79.3	10.0	31.5	19.2	1,250
Education					
No education	73.9	3.6	8.9	25.6	383
Primary 1-4	71.3	6.5	14.2	27.0	798
Primary 5-8	82.9	11.9	30.6	15.7	1,220
Secondary+	88.7	33.2	60.4	8.6	859
Wealth quintile					
Lowest	63.8	4.9	16.1	34.9	412
Second	77.4	4.2	18.5	21.9	640
Middle	83.0	7.3	26.6	15.5	699
Fourth	85.1	11.0	32.7	14.0	709
Highest	85.3	39.9	54.5	11.0	802
Total	80.5	15.2	31.9	17.8	3,261

5.17 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

As in the 2000 MDHS survey, respondents in the 2004 MDHS who were not using contraception were asked whether they had any contact with a family planning provider in the last 12 months. They were also asked whether they had attended a health facility in the last year and, if so, whether a member of the staff at that facility spoke to them about family planning methods. This information is important for determining whether family planning initiatives in Malawi are reaching nonusers of family planning. This information is also used to evaluate whether there are missed opportunities in introducing family planning to nonusers.

Table 5.19 shows that 68 percent of women neither received a visit from a family planning worker nor visited a health facility where family planning information or services could potentially have been provided. One in ten women reported that they were visited by a health fieldworker who discussed family planning. One in four women (24 percent) visited a health facility but the health worker they saw did not discuss family planning. This is a missed opportunity and may indicate that family planning has not been fully integrated into the health services delivery system for women. Overall, only 26 percent of women who visited a health facility in the past year discussed family planning at the facility with health personnel.

Background characteristic	Women visited by fieldworker who discussed family planning	Women visited health facility and discussed family planning	Women visited health facility didn't discuss family planning	Did not discuss FP with field worker or at a health facility	Number of women
Age					
15-19	5.1	10.4	21.6	86.1	2,190
20-24	9.8	32.5	26.3	62.4	2,136
25-29	14.2	36.3	27.4	57.0	1,468
30-34	13.1	35.6	22.5	58.1	1,004
35-39	15.3	30.6	25.6	60.8	751
40-44	11.6	21.4	21.9	71.2	608
45-49	10.6	14.5	19.6	77.5	538
Residence					
Urban	9.9	20.4	26.0	73.1	1,489
Rural	10.5	27.0	23.7	67.4	7,205
Region					
Northern	10.5	24.7	28.3	69.6	1,054
Central	9.3	22.4	25.3	72.5	3,526
Southern	11.3	29.1	22.0	64.5	4,114
District					
Blantyre	7.9	23.0	23.3	72.7	646
Kasungu	7.1	22.2	21.6	73.2	343
Machinga	8.5	28.3	18.2	68.1	328
Mangochi	16.5	21.2	20.6	67.6	493
Mzimba	10.9	24.9	28.2	69.6	537
Salima	14.7	30.6	25.6	62.5	249
Thyolo	13.6	41.5	22.3	53.5	458
Zomba	8.3	34.0	27.6	62.8	478
Lilongwe	8.1	15.8	26.9	79.1	1,233
Mulanje	10.6	36.2	17.9	58.3	396
Other districts	10.8	26.2	24.2	67.5	3,533
Education					
No education	11.7	25.2	21.1	68.1	2,064
Primary 1-4	10.6	28.2	23.5	66.2	2,272
Primary 5-8	10.3	25.7	25.2	68.7	3,041
Secondary+	8.3	23.2	27.2	71.6	1,315
Wealth quintile					
Lowest	10.1	25.8	22.8	69.0	1,636
Second	11.1	26.9	22.3	67.2	1,743
Middle	11.1	28.5	24.1	65.5	1,776
Fourth	10.1	27.2	24.9	67.5	1,665
Highest	9.7	21.2	26.1	72.4	1,873
Total	10.4	25.9	24.1	68.4	8,694

It should be noted that there are small variations across subgroups of women. However, access to family planning information and services are most limited to teenagers at both the community- and the facility-levels. Not only are these young women less likely to visit a health facility but when they do, they are less likely to discuss family planning with the health personnel.

Among the oversampled districts, lack of access to family planning information either from health personnel at a health facility or from a fieldworker at home ranges from 54 percent of women in Thyolo to 79 percent in Lilongwe. However, women in Thyolo are more likely than women in other districts to have a discussion about family planning at a health facility when they visit the facility.

5.18 DISCUSSION OF FAMILY PLANNING WITH HUSBAND

Although discussion between husband and wife about contraceptive use is not a precondition for adoption of family planning, the lack of such discussions may prevent its adoption. Communication between spouses is therefore important for the adoption and eventual continuation of family planning. Lack of discussion may indicate a lack of personal interest, opposition to contraception, or an expression of traditional taboo associated with talking about sex-related matters even in the family. It may also indicate that the couple has settled into a long-term pattern of use of a contraceptive method, rendering continued discussion of the matter moot. The 2004 MDHS asked currently married women who know a contraceptive method about the number of times they discussed family planning with their husbands in the past 12 months.

Table 5.20 shows that the majority of currently married women with knowledge of a contraceptive method discussed family planning with their husbands at least once during the past year (72 percent). Thirty eight percent of them did so at least three times during that year. However, 28 percent of married women report that they never discussed family planning with their husbands in the past year. Currently married teenagers and women above 40 years of age are less likely than other women to discuss family planning with their husbands; 37 percent of women age 15-19 and 35 percent or higher of women age 40 and older did not discuss family planning with their husbands.

Age	Number of times family planning discussed with husband				Total	Number of women
	Never	One or two	Three or more	Missing		
15-19	36.5	35.5	27.6	0.5	100.0	751
20-24	25.1	36.2	38.4	0.3	100.0	2,249
25-29	19.5	37.7	42.4	0.3	100.0	1,800
30-34	24.4	31.7	43.6	0.3	100.0	1,216
35-39	29.1	31.6	39.3	0.0	100.0	899
40-44	34.6	30.1	35.1	0.2	100.0	745
45-49	45.9	26.9	26.8	0.3	100.0	537
Total	27.5	34.1	38.1	0.3	100.0	8,197

5.19 MEN'S ATTITUDES TOWARDS CONTRACEPTION

When couples have a positive attitude toward family planning, they are more likely to adopt a family planning method. This is especially important when the man's attitude is positive, as the man is usually the main decisionmaker in the home. Table 5.21 shows that 34 percent of men who know a method of family planning report that a woman should use a contraceptive because she is the one who becomes pregnant and 27 percent say that contraception is women's business.

While only 17 percent say that women who use contraceptives may become promiscuous, this view is expressed strongly by men who are not living together with their partners (30 percent). In general, rural men, men in the Central Region, less educated men, and men in the lower wealth quintiles are more likely to agree with the three statements. For instance, while 35 percent of men with no education say that using contraception is women's business, the corresponding proportion for men with secondary or higher education is 12 percent. Similarly, while 40 percent of men in the lowest wealth quintile say that women should use contraception because they are the ones who become pregnant, this view is shared by only 23 percent of men in the highest wealth quintile.

Table 5.21 Men's attitudes towards contraception

Among men age 15-54 who know of a method of family planning, percentage who agree with specific statements about contraceptive use, by background characteristics, Malawi 2004

Background characteristic	Contraception is women's business	Women who use contraception may become promiscuous	Woman should use contraception, she becomes pregnant	Number of men
Age				
15-19	25.2	16.1	30.7	605
20-24	27.6	19.3	34.8	572
25-29	24.2	18.1	33.7	624
30-34	23.1	16.8	33.4	480
35-39	33.5	22.8	40.3	289
40-44	28.3	16.8	36.7	282
45-49	26.4	10.4	36.6	179
50-54	32.4	13.9	35.2	147
Marital status				
Never married	21.1	16.8	28.5	1,027
Married	29.3	17.2	37.5	2,026
Living together	(24.5)	(17.9)	(33.7)	28
Widowed	*	*	*	17
Divorced	(26.5)	(29.9)	(29.5)	38
Not living together	(34.7)	(29.8)	(37.3)	42
Residence				
Urban	22.5	18.1	28.5	645
Rural	27.6	17.3	35.9	2,533
Region				
Northern	13.0	18.1	16.3	416
Central	35.8	21.1	46.9	1,331
Southern	21.8	13.9	28.0	1,431
District				
Blantyre	15.4	15.3	30.2	311
Kasungu	44.1	20.5	44.8	153
Machinga	4.3	3.3	6.7	109
Mangochi	11.8	10.8	12.6	137
Mzimba	13.5	15.0	15.9	208
Salima	19.8	18.1	32.1	76
Thyolo	43.1	16.1	50.7	169
Zomba	19.1	27.6	28.6	159
Lilongwe	38.7	24.2	46.2	517
Mulanje	41.9	22.4	54.0	112
Other Districts	25.6	15.5	34.1	1,227
Education				
No education	34.6	22.8	48.8	369
Primary 1-4	41.0	18.0	45.1	772
Primary 5-8	25.4	18.2	36.1	1,185
Secondary+	11.7	13.4	15.9	850
Wealth quintile				
Lowest	34.6	20.1	40.3	396
Second	32.7	17.6	40.1	621
Middle	29.5	18.0	38.3	684
Fourth	23.4	16.0	34.8	695
Highest	17.8	16.7	23.1	782
Total	26.6	17.4	34.4	3,178

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.

OTHER PROXIMATE DETERMINANTS OF FERTILITY

6

George Mandere

This chapter focuses on the principal factors, other than contraception, which affect a woman's risk of becoming pregnant. These factors include marriage, sexual activity, postpartum amenorrhoea and abstinence from sexual activity, and onset of menopause. While it is by no means exact, marriage is an indicator of exposure of a woman to the risk of becoming pregnant. An inverse relationship exists between age at marriage and level of fertility; the level of fertility tends to be high in populations in which age at marriage is low. Postpartum amenorrhoea and abstinence affect the length of the interval between births. The onset of menopause signals the end of a woman's childbearing life. These factors determine the pace and length of reproductive activity and are therefore important for understanding levels and trends of fertility in a population.

6.1 MARITAL STATUS

The 2004 DHS collected information on the marital status of both male and female respondents. In this context, the term "married" refers to legal or formal marriage, while "living together" designates an informal union. Marriage is a primary indicator of the exposure of a woman to the risk of becoming pregnant. Table 6.1 shows the percent distribution of respondents by their current marital status according to age. The data in the first panel indicate that 17 percent of women of reproductive age have never been married, 67 percent are married, 4 percent are in informal unions, and 12 percent are divorced, separated, or widowed. Men are much less likely to be married than women; 33 percent have never been married, and 63 percent are married. Few men are divorced, separated, or widowed.

Table 6.1 Current marital status								
Percent distribution of women and men by current marital status, according to age, Malawi 2004								
Age	Marital status						Total	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed		
WOMEN								
15-19	63.7	29.8	3.1	1.5	1.6	0.2	100.0	2,392
20-24	12.0	75.1	4.4	4.5	3.0	1.0	100.0	2,870
25-29	3.4	78.8	5.3	6.1	3.8	2.6	100.0	2,157
30-34	0.9	78.5	4.3	6.2	4.8	5.1	100.0	1,478
35-39	0.7	75.9	4.9	6.9	3.6	8.0	100.0	1,117
40-44	0.4	76.2	4.4	5.9	5.0	8.1	100.0	935
45-49	0.4	69.4	3.3	9.3	3.4	14.0	100.0	749
Total	16.8	66.8	4.3	5.0	3.3	3.7	100.0	11,698
MEN								
15-19	96.8	1.9	0.4	0.1	0.8	0.0	100.0	650
20-24	52.4	42.7	1.5	1.2	2.2	0.0	100.0	587
25-29	18.4	76.7	1.0	1.8	1.2	0.8	100.0	634
30-34	3.4	90.7	1.1	1.9	2.6	0.3	100.0	485
35-39	2.7	94.8	0.3	0.8	0.8	0.6	100.0	294
40-44	1.1	95.8	0.3	1.4	0.3	1.2	100.0	282
45-49	1.8	94.2	1.2	1.5	0.0	1.4	100.0	182
50-54	0.2	95.0	1.7	1.2	0.4	1.5	100.0	148
Total	33.2	62.9	0.9	1.2	1.3	0.5	100.0	3,261

A similar pattern is observed in the 2000 DHS, except that the proportion of women who are living with a man has increased from 1 percent to 4 percent.

The percentage of women who have never married decreases sharply from 64 percent at age 15-19 to 3 percent or less at age 25-29 and older. Less than 1 percent of women age 30 and older remain unmarried. There is a rise in the percentage of women widowed with increasing age. For example, the percentage of widowed women increases from less than 3 percent in age 25-29 to 14 percent in age 45-49.

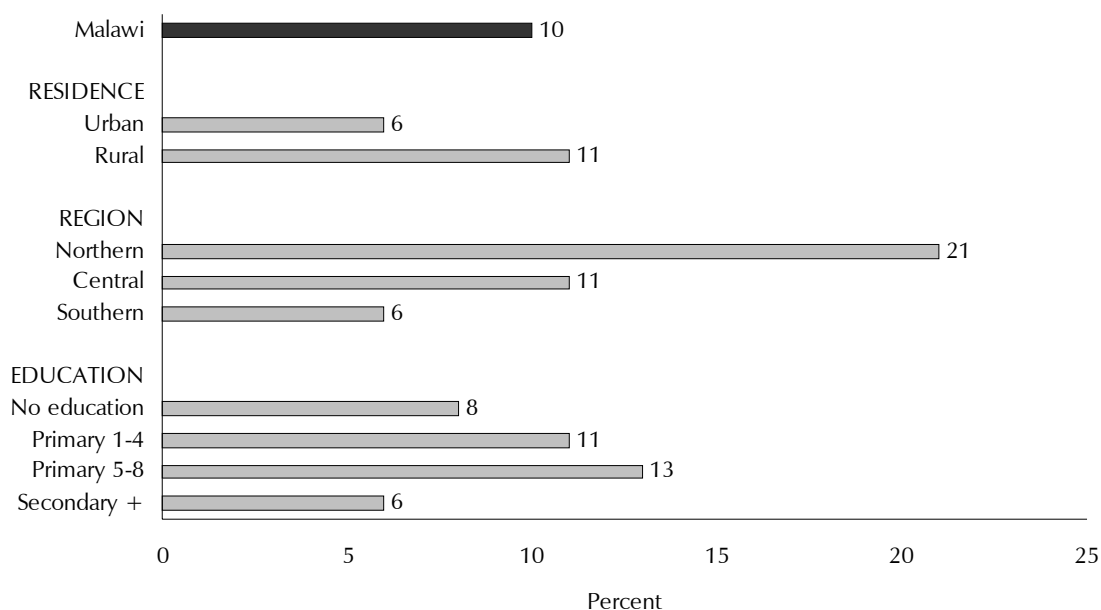
6.2 POLYGYNY

In Malawi, marriages can be classified as polygynous or monogamous unions. The extent of polygyny in Malawi was measured in the 2004 MDHS by asking married women whether their husbands had other wives, and if so, how many. Table 6.2 presents the percent distribution of currently married women by number of cowives according to background characteristics.

Overall, 84 percent of all currently married women are in monogamous unions, 12 percent are in polygynous unions with one cowife, and 3 percent are in polygynous unions with two or more cowives. In general, women in older age groups, living in rural areas or the Northern Region, less educated, and in the lowest wealth quintile are also more likely to be in a polygynous union. Among the oversampled districts, polygyny is most common in Mangochi and Mzimba (24 percent each). While polygyny in Malawi declined substantially from 21 percent in the 1992 MDHS to 17 percent in the 2000 MDHS, it has since remained at a similar level (16 percent in 2004).

Data on polygynous unions among currently married men are also given in Table 6.2 and Figure 6.1. One in ten married men report being in a polygynous union. However, this proportion varies by age, place of residence, region, and level of education. Polygyny increases with age; whereas only 11 percent of married men age 30-34 are in a polygynous union, the corresponding proportion for men age 50-54 is 16 percent.

Figure 6.1 Percentage of Currently Married Men in a Polygynous Marriage, by Background Characteristics



MDHS 2004

6.3 AGE AT FIRST MARRIAGE

For most societies, marriage marks the point of a woman's life when childbearing first becomes socially acceptable. Women who marry early will, on average, have longer exposure to reproductive risk; therefore, early age at marriage often implies early age at childbearing and higher fertility for a society. Information on age at first marriage was obtained by asking all ever-married respondents the month and year they started living together with their first spouse.

Table 6.3 shows the percentage of women and men who were first married by exact ages and median age at first marriage, according to current age. The median age at first marriage for women age 20-49 in Malawi has remained constant since 2000 at 18.0 years. Overall, 51 percent of women age 20-49 are married by age 18, and 73 percent are married by age 20. The percentage of women who are married by age 15 declined from 15 percent among women age 45-49 to 6 percent among women age 15-19.

Men enter into first marriage about five years later than women; the median age at first marriage for men is 22.9 years compared with 18.0 years for women. While only 22 percent of men are married by age 20, the corresponding proportion for women is 73 percent.

Table 6.3 Age at first marriage

Percentage of women and men who were first married by specific exact ages and median age at first marriage, according to current age, Malawi 2004

Current age	Percentage first married by exact age:					Percentage never married	Number	Median age at first marriage
	15	18	20	22	25			
WOMEN								
15-19	6.2	na	na	na	na	63.7	2,392	a
20-24	10.7	48.9	73.1	na	na	12.0	2,870	18.1
25-29	12.7	47.5	72.4	85.7	94.9	3.4	2,157	18.2
30-34	14.1	52.7	74.1	85.3	93.8	0.9	1,478	17.8
35-39	19.0	54.5	74.9	84.1	92.9	0.7	1,117	17.7
40-44	16.1	54.7	76.2	86.6	93.7	0.4	935	17.7
45-49	15.3	49.2	69.6	81.7	90.8	0.4	749	18.1
20-49	13.6	50.5	73.3	na	na	4.8	9,306	18.0
MEN								
15-19	0.0	na	na	na	na	96.8	650	a
20-24	0.1	7.8	21.5	na	na	52.4	587	a
25-29	0.2	7.4	19.9	44.0	69.2	18.4	634	23.1
30-34	0.0	8.5	21.0	39.7	67.6	3.4	485	23.0
35-39	0.0	11.4	25.2	41.4	68.8	2.7	294	23.0
40-44	0.4	10.3	26.7	47.3	72.4	1.1	282	22.2
45-49	0.0	7.8	15.2	38.2	64.7	1.8	182	23.2
50-54	1.3	5.2	23.4	42.0	71.2	0.2	148	23.0
25-54	0.2	8.5	21.7	42.4	68.9	7.3	2,025	22.9
na = Not applicable								
a = Omitted because less than 50 percent of the women married for the first time before reaching the beginning of the age group								

Table 6.4 examines the median age at first marriage among women age 20-49 and men age 25-54, by age and background characteristics. Overall, Table 6.4 shows small variations in the median age at first marriage across subgroups of women. Urban women tend to marry one year later than their rural counterparts (18.9 years compared with 17.8 years). Education is strongly related to later marriage among women; for example, the median age at first marriage among women age 25 to 29 with no education is 17.2 years compared to 21.6 years for those with secondary education or higher. Wealth status is not closely associated with age at first marriage; women in the highest wealth quintile marry about one year older than women in the lower quintiles.

The median age at first marriage among men age 25-54 is also presented in Table 6.4. The data show that rural men marry one year earlier than urban men. Age at first marriage among men does not vary much by other background characteristics.

Table 6.4 Median age at first marriage

Median age at first marriage among women age 20-49 and men age 25-54, by current age and background characteristics, Malawi 2004

WOMEN							
Background characteristic	Current age						Women age 20-49
	20-24	25-29	30-34	35-39	40-44	45-49	
Residence							
Urban	19.6	19.3	18.1	17.7	18.0	18.3	18.9
Rural	17.8	18.0	17.8	17.7	17.6	18.0	17.8
Region							
Northern	17.8	17.9	17.9	17.8	17.7	17.8	17.8
Central	18.7	18.6	17.9	18.1	18.1	18.4	18.4
Southern	17.6	17.9	17.7	16.9	17.3	17.8	17.6
Education							
No education	16.6	17.2	17.3	16.9	17.3	18.0	17.2
Primary 1-4	17.2	17.8	17.9	17.5	17.4	18.1	17.5
Primary 5-8	17.7	18.1	17.8	17.9	18.1	17.8	17.9
Secondary+	a	21.6	22.2	20.8	20.5	20.0	a
Wealth quintile							
Lowest	17.4	17.9	17.7	17.1	17.6	18.3	17.6
Second	17.7	17.8	17.3	18.0	17.9	18.4	17.7
Middle	17.6	17.8	17.7	17.6	17.3	17.6	17.6
Fourth	18.2	18.0	18.0	17.3	17.5	17.8	17.9
Highest	a	19.5	18.7	18.3	18.0	18.4	19.2
Total	18.1	18.2	17.8	17.7	17.7	18.1	18.0
MEN							
Background characteristic	Current age						Men age 25-54
	25-29	30-34	35-39	40-44	45-49	50-54	
Residence							
Urban	24.2	23.8	23.8	22.7	24.2	19.3	23.8
Rural	22.5	22.7	22.8	22.1	23.2	23.1	22.6
Region							
Northern	23.8	22.9	24.8	22.5	22.7	22.8	23.1
Central	23.2	23.2	23.1	22.8	24.0	21.6	23.1
Southern	22.3	22.8	22.7	21.5	23.0	24.2	22.6
Education							
No education	21.1	22.2	23.8	22.0	21.9	22.5	22.1
Primary 1-4	21.4	22.0	20.6	22.1	24.5	23.0	21.8
Primary 5-8	21.7	22.1	22.8	22.0	22.3	22.0	22.1
Secondary+	a	26.5	25.6	22.7	27.4	24.3	a
Wealth quintile							
Lowest	23.3	22.5	22.5	22.4	20.8	22.2	22.5
Second	21.4	22.7	22.6	22.1	22.8	24.4	22.2
Middle	22.4	23.1	22.5	21.6	24.0	23.4	22.6
Fourth	22.5	21.9	22.2	21.9	22.8	22.8	22.2
Highest	24.9	26.4	25.0	23.1	24.7	22.6	a
Total	23.1	23.0	23.0	22.2	23.2	23.0	22.9

Note: Age at first marriage is the age at which the respondent began living with her/his first spouse/partner.

a = Omitted because less than 50 percent of respondents married for the first time before reaching the beginning of the age group

6.4 AGE AT FIRST SEXUAL INTERCOURSE

Age at first marriage is often used as a proxy for the onset of women's exposure to the risk of pregnancy. However, since some women are sexually active before marriage, the age at which women initiate sexual intercourse more precisely marks the beginning of their exposure to reproductive risk. Table 6.5 shows the percentage of women and men who had first sexual intercourse by exact ages.

Overall, 17 percent of women age 20-49 have had sexual intercourse by age 15. By age 20, this proportion is 78 percent. The median age at first sexual intercourse for women has increased slightly since 2000 from 16.9 years to 17.3 years in 2004. While nearly half (48 percent) of women age 15-19 have never had sexual intercourse, this percentage drops to 5 percent among women age 20 and older. By age 25, virtually all women have had sex.

Data for men show that 9 percent of men aged 25-54 have had sexual intercourse by age 15, 64 percent have had sex by age 20, and 90 percent have had sex by age 25. As in the case for women, nearly half (48 percent) of men age 15-19 have never had sexual intercourse, compared with 11 percent of men age 20-24. Virtually all men age 30 and older have had sex. The median age at first sexual intercourse decreases from 19.0 years for men aged 45-49 to 18.1 years for men 20-24 years.

Table 6.5 Age at first sexual intercourse								
Percentage of women and men who had first sexual intercourse by exact ages and median age at first intercourse, according to current age, Malawi 2004								
Current age	Percentage who had first sexual intercourse by exact age:					Percentage who never had intercourse	Number of respondents	Median age at first intercourse
	15	18	20	22	25			
WOMEN								
15-19	14.1	na	na	na	na	47.8	2,392	a
20-24	15.5	57.1	79.0	na	na	4.5	2,870	17.4
25-29	16.4	55.5	78.6	86.0	88.8	1.3	2,157	17.5
30-34	17.2	60.0	78.6	84.6	88.2	0.0	1,478	17.1
35-39	20.7	59.5	76.1	81.5	85.3	0.1	1,117	17.2
40-44	18.5	60.3	77.6	83.6	87.5	0.0	935	17.1
45-49	17.4	55.2	71.8	80.9	85.4	0.0	749	17.6
20-49	17.0	57.6	77.8	a	a	1.7	9,306	17.3
25-49	17.8	57.9	77.2	84.0	87.5	0.5	6,436	17.3
MEN								
15-19	18.0	na	na	na	na	47.7	650	a
20-24	9.1	47.7	74.1	na	na	11.2	587	18.1
25-29	10.0	39.9	65.0	80.0	91.9	3.0	634	18.6
30-34	9.7	43.5	67.5	80.4	93.5	0.4	485	18.4
35-39	9.7	42.7	64.5	77.1	87.2	0.0	294	18.4
40-44	6.7	37.0	62.0	77.5	88.5	0.0	282	18.8
45-49	5.2	32.7	55.3	69.6	81.9	1.0	182	19.0
50-54	4.8	29.5	59.2	74.0	89.2	0.2	148	19.0
20-54	8.7	41.2	66.1	79.8	89.4	3.4	2,612	18.5
25-54	8.6	39.4	63.8	77.9	90.0	1.1	2,025	18.6

na = Not applicable
a = Omitted because less than 50 percent of the women had intercourse for the first time before reaching the beginning of the age group

Table 6.6.1 shows the differentials in the median age at first sexual intercourse for women age 20-49 by background characteristics. While there are small urban-rural differences, women in the Southern Region started having sex at an earlier age than women in Northern and Central Regions (16.7 years compared to 17.7 years or older). The data show that there is a strong inverse relationship between a woman's education and her initiation to sexual activity. Women with secondary or higher education have their first sexual intercourse more than two years later than women with less education (19.2 years compared with 16.5 years). Wealth quintile is also associated with the median age at first sexual intercourse; median age at first intercourse for women in the highest wealth quintile (18.2 years) is more than one year higher than for women in the lowest quintile (16.9 years). The median age at first sexual intercourse varies by district, ranging between 15.6 years in Thyolo and 18.2 years in Lilongwe.

Table 6.6.1 Median age at first intercourse: women							
Median age at first sexual intercourse among women age 20-49, by current age and background characteristics, Malawi 2004							
Background characteristic	Current age						Women 20-49
	20-24	25-29	30-34	35-39	40-44	45-49	
Residence							
Urban	18.1	18.2	17.7	17.6	17.2	17.8	17.9
Rural	17.2	17.4	17.0	17.2	17.1	17.5	17.2
Region							
Northern	17.6	17.6	18.1	17.6	17.5	18.1	17.7
Central	18.2	18.2	17.5	17.8	17.5	18.1	18.0
Southern	16.7	16.8	16.6	16.4	16.6	16.9	16.7
District							
Blantyre	17.4	18.2	17.3	18.1	17.7	19.2	17.7
Kasungu	17.7	17.7	17.8	17.8	17.5	17.0	17.6
Machinga	16.7	16.0	16.5	16.1	16.1	16.1	16.3
Mangochi	16.8	16.1	16.5	16.5	17.7	17.9	16.8
Mzimba	17.5	17.9	17.8	17.6	17.7	17.8	17.7
Salima	17.8	17.8	16.9	17.1	17.9	20.0	17.6
Thyolo	15.8	15.6	15.7	15.3	15.7	15.2	15.6
Zomba	16.4	16.5	16.3	15.9	16.4	16.5	16.4
Lilongwe	18.6	18.5	17.2	17.8	17.6	18.3	18.2
Mulanje	16.2	16.1	16.0	16.5	16.0	16.8	16.2
Other districts	17.6	17.6	17.5	17.5	17.0	17.8	17.5
Education							
No education	16.1	16.2	16.4	16.7	16.6	17.5	16.5
Primary 1-4	16.6	17.0	17.4	17.1	16.6	17.5	16.9
Primary 5-8	17.3	17.5	17.3	17.5	17.8	17.4	17.4
Secondary+	19.1	19.2	19.7	18.8	19.7	18.8	19.2
Wealth quintile							
Lowest	16.7	16.9	16.8	16.9	16.6	17.7	16.9
Second	16.9	17.3	16.5	16.9	17.3	17.1	16.9
Middle	17.1	17.1	16.9	17.5	16.8	17.0	17.1
Fourth	17.7	17.7	17.5	17.0	17.0	17.9	17.5
Highest	18.5	18.3	18.0	17.8	17.6	17.9	18.2
Total	17.4	17.5	17.1	17.2	17.1	17.6	17.3

Unlike women, men do not show much variation with regard to their age at first sex by their background characteristics (Table 6.6.2). Among the oversampled districts, the median ranges from 17.2 years in Salima to 19.2 years in Mzimba.

Table 6.6.2 Median age at first intercourse: men

Median age at first sexual intercourse among men age 20-54, by current age and background characteristics, Malawi 2004

Background characteristic	Current age							Men 20-54
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	
Residence								
Urban	18.3	18.5	18.4	18.4	18.0	17.5	18.2	18.3
Rural	18.1	18.6	18.4	18.4	18.8	19.9	19.2	18.6
Region								
Northern	18.3	18.9	18.4	19.6	18.7	19.8	a	18.8
Central	18.5	18.8	18.4	18.4	19.0	20.1	18.8	18.7
Southern	17.4	18.3	18.5	18.3	18.7	18.5	19.3	18.3
District								
Blantyre	18.1	17.3	17.1	18.2	18.4	17.1	a	17.7
Kasungu	18.1	17.3	18.2	20.2	18.0	18.8	19.4	18.3
Machinga	17.0	18.2	18.9	16.6	18.8	17.5	a	18.3
Mangochi	17.1	17.8	18.1	20.1	18.2	19.7	19.3	18.2
Mzimba	18.4	18.7	19.2	19.7	18.8	22.1	a	19.2
Salima	17.5	16.4	16.2	19.2	18.0	18.9	17.4	17.2
Thyolo	17.3	18.4	17.5	17.3	19.2	20.0	18.3	18.1
Zomba	17.0	18.8	18.1	16.7	17.7	18.0	17.5	18.0
Lilongwe	18.4	20.0	18.7	18.1	18.6	19.7	16.9	18.6
Mulanje	16.5	19.2	19.3	18.2	17.4	18.5	18.2	18.2
Other districts	18.3	18.7	19.0	18.7	20.0	20.3	19.8	18.8
Education								
No education	16.9	18.1	18.3	18.5	18.2	21.0	a	18.5
Primary 1-4	18.0	18.5	18.3	18.6	18.5	18.0	18.8	18.4
Primary 5-8	18.3	18.4	18.3	18.0	19.1	18.8	18.9	18.4
Secondary+	18.3	19.0	19.0	18.7	19.7	20.0	19.9	18.8
Wealth quintile								
Lowest	18.4	18.8	17.7	19.5	20.8	16.9	18.9	18.7
Second	17.9	18.4	18.8	18.2	18.4	20.0	19.1	18.4
Middle	17.2	19.2	18.5	17.7	18.8	21.2	18.7	18.6
Fourth	18.0	18.2	18.3	18.0	18.5	18.7	19.4	18.3
Highest	18.5	18.5	18.6	19.4	18.8	18.6	19.0	18.6
Total	18.1	18.6	18.4	18.4	18.8	19.0	19.0	18.5

a = Omitted because less than 50 percent of the men had intercourse for the first time before reaching the beginning of the age group

6.5 RECENT SEXUAL ACTIVITY

Although few women age 20-49 have never had sexual intercourse, not all those who have ever had sex are currently sexually active. In the absence of effective contraception, the probability of becoming pregnant is related to the frequency of intercourse. Information on recent sexual activity, therefore, can be used to refine measures of exposure to pregnancy. Women who have ever had sex were asked how long ago their last sexual activity occurred; this allows an assessment of whether they had a recent sexual encounter. Table 6.7.1 shows the distribution of women by their most recent sexual activity. Women are considered to be sexually active if they had sexual intercourse at least

once in the four weeks preceding the survey. Women who are not sexually active may be abstaining for various reasons, such as having recently given birth (i.e., postpartum abstinence).

The data indicate that 55 percent of women had sexual intercourse in the four weeks preceding the survey, another 22 percent had sexual intercourse in the past year, and 9 percent had intercourse one or more years before the survey. Eleven percent of women age 15-49 have never had sex.

Recent sexual activity varies by age, ranging from 28 percent of women age 15-19 having sex within the 4 weeks prior to the survey to 66 percent of women age 25-29. As expected, women who are married or living together are much more likely to be sexually active than women who are not in union (divorced, separated, widowed, and never-married women). While 75 percent of married women were sexually active in the four weeks preceding the survey, the proportion for nonmarried women is 16 percent.

While there is no urban-rural difference in sexual activity in the last four weeks, women in the Central Region are more likely to have had sex in the last four weeks than women in the Southern and Northern Regions (58 percent compared with 55 percent and 49 percent, respectively). There is a negative association between recent sexual activity and the respondent's education. The percentage of women with no education who had sex in the last four weeks is 61 percent compared with 44 percent of women with at least a secondary education.

Women who are using family planning methods are more likely than women who are not to have had sexual intercourse within the past four weeks. Among users of family planning methods, sexual activity is highest among pill users. There are marked variations in recent sexual activity according to wealth index, with women in the middle wealth quintile being more likely to have had sex in the four weeks before the survey than those in the higher and lower wealth quintiles. The percentage of women who were sexually active in the past four weeks increases from 46 percent among women in the lowest wealth quintile to 60 percent for women with the middle wealth quintile, and declines to 53 percent for women in the highest quintile. Among the oversampled districts, the proportion of women who had sex in the four weeks before the survey ranges from 47 percent in Mangochi to 64 percent in Kasungu.

Table 6.7.2 shows that 64 percent of men had sexual intercourse in the four weeks preceding the survey, another 15 percent had sex within the past year, and 10 percent had sexual intercourse one or more years before the survey. Twelve percent of men have never had sex. Men's recent sexual activity increases with age; while 21 percent of men age 15-19 were sexually active in the past four weeks, the corresponding proportion for men age 25 and older is 73 percent or higher. As with women, men who are married or living together are the most active sexually in recent weeks (86 percent), compared with divorced, separated or widowed men (34 percent), and never-married men (23 percent).

The percentage of men who were sexually active in the four weeks preceding the survey increases from 82 percent for men who have been married 0-4 years to 92 percent among those married for 10-14 years. Urban men are less likely than rural men to have had sexual intercourse in the past four weeks (57 and 65 percent, respectively). There are small differentials across regions in men's recent sexual activity.

Table 6.7.2 Recent sexual activity: men

Percent distribution of men by timing of last sexual intercourse, according to background characteristics, Malawi 2004

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of men
	Within the past 4 weeks	Within one year ¹	One or more years	Missing			
Current age							
15-19	20.5	13.8	18.1	0.0	47.7	100.0	650
20-24	52.2	21.8	14.6	0.1	11.2	100.0	587
25-29	72.8	16.1	8.1	0.0	3.0	100.0	634
30-34	84.1	11.2	4.3	0.0	0.4	100.0	485
35-39	81.5	12.8	5.7	0.0	0.0	100.0	294
40-44	85.4	11.6	3.1	0.0	0.0	100.0	282
45-49	84.3	8.5	5.2	1.1	1.0	100.0	182
50-54	87.5	8.8	3.4	0.0	0.2	100.0	148
Marital status							
Never married	22.6	19.0	21.7	0.0	36.8	100.0	1,084
Married or living together	86.3	11.6	2.0	0.1	0.0	100.0	2,079
Divorced/separated/widowed	33.7	26.5	39.8	0.0	0.0	100.0	98
Marital duration²							
Married only once							
0-4 years	82.2	16.1	1.6	0.1	0.0	100.0	487
5-9 years	85.5	11.4	3.1	0.0	0.0	100.0	381
10-14 years	91.5	6.9	1.6	0.0	0.0	100.0	248
15-19 years	83.9	13.2	2.8	0.0	0.0	100.0	185
20-24 years	87.0	9.6	2.7	0.7	0.0	100.0	140
25+ years	87.7	10.0	1.4	0.9	0.0	100.0	111
Married more than once	88.5	10.1	1.5	0.0	0.0	100.0	528
Residence							
Urban	57.1	16.8	9.9	0.0	16.3	100.0	669
Rural	65.2	13.9	9.6	0.1	11.2	100.0	2,593
Region							
Northern	51.8	17.1	13.5	0.0	17.6	100.0	423
Central	65.0	12.0	9.2	0.2	13.7	100.0	1,370
Southern	65.5	16.1	9.1	0.0	9.3	100.0	1,486
District							
Blantyre	62.1	18.7	9.5	0.0	9.7	100.0	316
Kasungu	65.6	13.5	9.3	0.0	11.5	100.0	156
Machinga	60.8	23.6	4.6	0.4	10.6	100.0	114
Mangochi	71.7	15.2	8.5	0.0	4.5	100.0	150
Mzimba	48.8	18.9	15.5	0.0	16.8	100.0	212
Salima	69.6	18.3	4.5	0.0	7.5	100.0	78
Thyolo	67.6	15.4	8.2	0.0	8.7	100.0	169
Zomba	71.6	12.9	8.7	0.0	6.8	100.0	159
Lilongwe	61.4	13.0	10.0	0.0	15.6	100.0	542
Mulanje	69.8	12.6	10.5	0.0	7.1	100.0	114
Other Districts	63.8	12.5	9.8	0.2	13.7	100.0	1,250
Education							
No education	79.7	11.8	6.0	0.5	2.0	100.0	383
Primary 1-4	66.4	14.6	7.3	0.0	11.8	100.0	798
Primary 5-8	63.8	12.3	8.9	0.0	15.0	100.0	1,220
Secondary+	53.3	18.8	14.6	0.0	13.2	100.0	859
Wealth quintile							
Lowest	63.4	16.5	10.2	0.0	9.9	100.0	412
Second	66.4	13.4	8.2	0.2	11.8	100.0	640
Middle	69.4	13.0	8.6	0.1	8.9	100.0	699
Fourth	64.1	14.2	10.4	0.1	11.3	100.0	709
Highest	55.6	16.0	10.9	0.0	17.5	100.0	802
Total	63.5	14.5	9.7	0.1	12.2	100.0	3,261

¹ Excludes men who had sexual intercourse in the past 4 weeks² Excludes men who are not currently married

The level of recent sexual activity decreases with increasing education; 80 percent of men with no education had sexual intercourse in the four weeks prior to the survey, compared with 53 percent of men with secondary or higher education. Variations in recent sexual activity among men by wealth index are similar to those for women, with men in the middle quintile being the most active sexually. With respect to district, the proportion ranges from 49 percent in Mzimba to 72 percent in Mangochi and Zomba.

6.6 POSTPARTUM AMENORRHOEA, ABSTINENCE, AND INSUSCEPTIBILITY

Postpartum amenorrhoea refers to the interval between childbirth and the return of menstruation. During this period, the risk of a woman becoming pregnant is much reduced. How long this protection from conception following childbirth lasts depends on the length and intensity of breastfeeding and the length of time before the resumption of sexual intercourse. Postpartum abstinence refers to the period of voluntary sexual inactivity after childbirth. Women are considered to be insusceptible to pregnancy if they are not exposed to the risk of pregnancy either because they are amenorrhoeic or because they are abstaining from sexual intercourse after a birth.

In the MDHS 2004, women who gave birth during the three years prior to the survey were asked about their breastfeeding practices, the duration of amenorrhoea, and sexual abstinence. The results are presented in Table 6.8. The period of postpartum amenorrhoea is considerably longer than the period of postpartum abstinence and is, therefore, a principal determinant of the length of postpartum insusceptibility. The median duration of postpartum amenorrhoea is 11.5 months, median duration of postpartum abstinence is 5.5 months, and the median duration of

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrhoeic	Abstaining	Insusceptible	
< 2	93.5	95.3	98.5	327
2-3	91.4	77.7	96.1	430
4-5	76.6	60.9	85.6	382
6-7	76.5	38.9	83.0	439
8-9	63.8	26.1	70.7	417
10-11	53.6	21.3	61.5	393
12-13	45.6	14.0	50.1	408
14-15	38.6	12.8	44.0	419
16-17	27.4	12.2	35.2	388
18-19	22.8	8.2	28.7	399
20-21	14.9	7.7	20.4	390
22-23	12.2	7.2	18.2	305
24-25	9.2	5.5	13.7	333
26-27	4.1	4.2	7.9	298
28-29	3.5	1.8	5.2	328
30-31	2.4	4.0	5.7	334
32-33	4.0	5.5	8.9	310
34-35	2.1	2.9	5.0	305
Total	38.2	23.6	43.7	6,607
Median	11.5	5.5	12.9	-
Mean	13.1	8.4	15.0	-

Note: Estimates are based on status at the time of the survey.

insusceptibility is 12.9 months. Nearly all women are insusceptible to pregnancy in the first two months after a birth, and both postpartum amenorrhoea and postpartum abstinence are equally important for insusceptibility. Beginning with two months after childbirth, the contribution of abstinence to insusceptibility decreases faster than that of amenorrhoea as a result of the resumption of sexual relations. In the 12-13 month period after the birth of a child, 46 percent of the women are amenorrhoeic, 14 percent are practicing abstinence, and 50 percent are still insusceptible to the risk of pregnancy.

Table 6.9 shows the median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility for births in the three years preceding the survey, by background characteristics. Women age 30-49 years have more than two months longer postpartum insusceptibility than women age 15-29 years (14.7 months compared with 12.2 months).

Background characteristic	Postpartum amenorrhoea	Postpartum abstinence	Postpartum insusceptibility	Number of births
Age				
15-29	10.8	5.4	12.2	4,663
30-49	13.5	5.9	14.7	1,944
Residence				
Urban	9.9	5.3	12.9	895
Rural	11.6	5.6	12.9	5,712
Region				
Northern	9.1	6.2	13.0	810
Central	11.5	4.0	12.2	2,770
Southern	12.1	6.7	13.3	3,027
District				
Blantyre	11.1	6.3	12.4	424
Kasungu	12.5	2.7	12.9	311
Machinga	12.5	6.9	13.5	267
Mangochi	12.4	9.2	13.6	398
Mzimba	10.1	7.8	15.0	407
Salima	9.8	5.1	10.3	198
Thyolo	13.3	7.2	13.4	349
Zomba	10.1	5.8	11.4	333
Lilongwe	9.9	4.5	9.9	930
Mulanje	11.7	7.8	12.2	269
Other districts	11.8	4.7	13.2	2,722
Education				
No education	14.0	6.0	15.2	1,656
Primary 1-4	12.2	5.4	12.8	1,925
Primary 5-8	11.3	5.5	12.4	2,263
Secondary+	8.3	4.8	9.7	761
Wealth quintile				
Lowest	14.2	6.6	16.0	1,304
Second	12.2	5.4	13.0	1,522
Middle	10.4	5.6	11.9	1,474
Fourth	11.2	5.2	12.5	1,261
Highest	9.0	4.8	10.4	1,046
Total	11.5	5.5	12.9	6,607

Note: Medians are based on current status.

While urban women have the same median duration of postpartum insusceptibility as women in the rural areas (12.9 months), women in the urban areas have a shorter median duration of postpartum amenorrhoea than women in the rural areas.

At the regional level, insusceptibility lasts for 12.2 months for women in the Central Region, almost one month shorter than women in the other regions (13.0 months or longer). Women in the Northern Region have the shortest duration of amenorrhoea compared to women in the Southern and Northern Regions (9.1 months and 11.5 months or longer, respectively).

The 2004 MDHS results show that the mean durations of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility are inversely related to a woman's educational attainment and wealth quintile. Women with secondary or higher education have the shortest median duration of postpartum amenorrhoea (8.3 months), postpartum abstinence (4.8 months), and postpartum insusceptibility (9.7 months), while women with no education have the longest median duration of postpartum amenorrhoea (14.0 months), postpartum abstinence (6.0 months), and postpartum insusceptibility (15.2 months).

Similarly, women in the lowest wealth quintile have the longest duration of postpartum amenorrhoea (14.2 months), abstinence (6.6 months), and insusceptibility (16.0 months), while women in the highest wealth quintile have the shortest durations of amenorrhoea (9.0 months), abstinence (4.8 months), and insusceptibility (10.4 months).

There are some variations in the duration of postpartum amenorrhoea, abstinence and insusceptibility among districts in Malawi. The duration of amenorrhoea ranges from 9.8 months in Salima to 13.3 months in Thyolo. Women in Kasungu have the shortest duration of postpartum abstinence (2.7 months), while women in Mangochi have the longest duration of abstinence (9.2 months). The period of insusceptibility is longest in Mzimba (15.0 months) and shortest in Lilongwe (9.9 months).

6.7 TERMINATION OF EXPOSURE TO PREGNANCY

The onset of infecundability in a woman is difficult to determine. However, there are ways of estimating the start of the termination of the exposure to the risk of pregnancy. Table 6.10 shows the percentage of women aged 30 years and over who are not pregnant and not postpartum amenorrhoeic, and whose last menstrual period occurred six or more months preceding the survey.

After age 30, exposure to the risk of pregnancy declines with age as an increasing proportion of women become infecund. The percentage of women who are menopausal increases slowly from 3 percent for women age 30-34 to 11 percent of women age 40-41 and to 17 percent for women 44-45. After age 45, the percentage of women who are menopausal increases sharply from 28 percent among women age 46-47 to 42 percent among women 48-49.

Age	Percentage menopausal ¹	Number of women
30-34	2.9	1,478
35-39	4.4	1,117
40-41	11.1	443
42-43	15.9	322
44-45	17.4	338
46-47	28.3	292
48-49	41.9	289
Total	10.6	4,279

¹ Percentage of all women who are not pregnant and not postpartum amenorrhoeic whose last menstrual period occurred six or more months preceding the survey

FERTILITY PREFERENCES AND UNMET NEED FOR FAMILY PLANNING

7

Sophie Kang'oma

Information on the fertility preferences of men and women provides family planning programmes with an assessment of trends in ideal family size, the prevailing need for contraception, and the extent of unwanted and mistimed pregnancies. Data on fertility preferences can also be useful as an indicator of future fertility trends.

In the 2004 MDHS, women and men were asked a series of questions to ascertain their fertility preferences, including their desire to have another child, the length of time they would like to wait before having another child, and what they consider to be the ideal number of children. These data make it possible to quantify fertility preferences and, in combination with data on contraceptive use, allow estimation of the unmet need for family planning, for both spacing and limiting births.

Interpretation of results on fertility preferences is a matter of controversy because respondents' reported preferences are, in most cases, hypothetical and thus subject to change and rationalisation.

7.1 DESIRE FOR MORE CHILDREN

Men and women in the 2004 MDHS were asked, "Would you like to have (a/another) child or would you prefer not to have any (more) children?" For pregnant women the question started with, "After the child you are expecting now ...". Respondents who said they wanted to have (a/another) child were then asked how long they would like to wait before the birth of the next child.

Tables 7.1.1 and 7.1.2 show fertility desires among married women and men by the number of living children they currently have. Although slightly more than half of women and men (54 percent each) wanted another child, only 14 percent of women and 12 percent of men wanted a child soon. Thirty-eight percent of women and 40 percent of men wanted to have another child after two or more years. Thirty-five percent of women indicated that they wanted no more children and therefore wanted to limit the family size at its current level, and 6 percent had already been sterilised. Thirty-eight percent of men also report wanting no more children. The data indicate that a majority of women (79 percent) want to space their next birth or end childbearing altogether. These women are potentially in need of either a reversible or permanent method of family planning.

The desire to end childbearing increases with the number of living children, from 5 percent among married women with no children to 67 percent among women with six or more children. This pattern is similar to that for men. There has been no change in fertility preferences among currently married women since 2000, despite the fact that the proportion of married women who wanted to end childbearing rose from 25 percent in 1992 to 42 percent in 2000.

Table 7.1.1 Fertility preferences by number of living children: women

Percent distribution of currently married women by desire for children, according to number of living children, Malawi 2004

Desire for children	Number of living children ¹							Total
	0	1	2	3	4	5	6+	
Have another soon ²	76.3	21.1	12.8	10.3	6.6	3.3	1.4	14.0
Have another later ³	7.9	62.4	55.2	44.0	27.8	16.1	8.2	38.2
Have another, undecided when	3.9	2.9	1.5	1.2	1.7	0.7	0.2	1.6
Undecided	2.1	4.0	4.3	5.0	4.4	3.3	1.8	3.8
Want no more	5.0	8.5	23.0	34.7	50.3	63.6	67.3	35.0
Sterilised ⁴	0.1	0.2	1.6	3.8	7.4	11.3	19.2	5.9
Declared infecund	4.5	0.6	1.3	0.9	1.8	1.5	1.6	1.4
Missing	0.2	0.2	0.1	0.1	0.0	0.1	0.3	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	438	1,657	1,726	1,440	1,033	810	1,209	8,312

¹ Includes current pregnancy

² Wants next birth within 2 years

³ Wants to delay next birth for 2 or more years

⁴ Includes both female and male sterilisation

Table 7.1.2 Fertility preferences by number of living children: men

Percent distribution of currently married men by desire for children, according to number of living children, Malawi 2004

Desire for children	Number of living children							Total
	0	1	2	3	4	5	6+	
Have another soon ¹	35.1	12.4	15.5	12.9	7.0	6.6	3.7	11.8
Have another later ²	52.1	66.4	54.5	38.9	29.6	21.5	14.4	39.6
Have another, undecided when	4.5	3.6	3.3	0.8	2.7	2.2	0.9	2.4
Undecided	1.9	4.7	4.3	8.9	5.6	7.5	5.3	5.5
Want no more	5.8	12.3	22.4	36.5	52.5	57.7	70.8	38.4
Declared infecund	0.6	0.8	0.1	2.0	2.5	4.5	5.0	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	160	346	383	310	266	213	402	2,079

¹ Wants next birth within 2 years

² Wants to delay next birth for 2 or more years

7.2 DESIRE TO LIMIT CHILDBEARING BY BACKGROUND CHARACTERISTICS

Table 7.2 shows the percentage of currently married women who want no more children by number of living children and background characteristics. Women living in urban areas are slightly more likely than women living in rural areas to want to stop childbearing (43 percent to 40 percent). This difference is more pronounced among those with 2-5 living children. Regional and district-level differentials are also notable. Currently married women in the Central Region are more likely to want to stop childbearing (45 percent) than those in the Northern or Southern Regions (38 percent each). Among districts, the proportion of women who want to stop childbearing ranges from 46 percent in Lilongwe to 29 percent in Mangochi. Blantyre, Kasungu, Salima, Thyolo, Mzimba, and Mulanje fall between 40-44 percent of women desiring no more children.

Table 7.2 *Desire to limit childbearing*

Percentage of currently married women who want no more children, by number of living children and background characteristics, Malawi 2004

Background characteristic	Number of living children ¹							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	5.4	9.6	38.0	51.8	70.2	83.8	89.6	43.2
Rural	5.0	8.5	21.8	35.9	55.6	73.7	86.1	40.4
Region								
Northern	9.2	7.6	14.7	27.9	47.8	73.7	86.3	38.1
Central	4.5	9.0	28.0	40.8	67.1	78.7	89.7	45.0
Southern	4.7	8.8	24.7	39.2	52.7	71.6	83.2	38.0
District								
Blantyre	13.4	9.6	30.6	44.8	66.6	86.2	89.4	41.3
Kasungu	2.4	3.7	21.2	29.5	62.6	71.9	85.4	41.9
Machinga	0.0	8.5	20.2	17.4	40.2	61.2	78.0	32.1
Mangochi	4.4	7.0	14.2	30.2	27.1	47.5	72.3	28.7
Mzimba	14.1	6.2	15.1	32.4	46.2	77.3	88.0	39.5
Salima	0.0	8.6	16.8	34.8	57.5	74.9	95.4	40.2
Thyolo	6.8	10.8	26.6	39.8	59.0	70.8	85.6	40.3
Zomba	4.8	8.1	23.6	38.8	68.3	73.3	78.6	38.2
Lilongwe	4.0	8.3	32.5	46.4	73.4	86.5	94.1	45.9
Mulanje	2.2	6.0	29.0	47.1	69.2	83.8	93.0	44.3
Other districts	4.1	10.0	24.3	38.9	55.8	72.9	86.4	41.7
Education								
No education	9.9	14.7	26.2	35.7	50.7	69.2	84.4	49.8
Primary 1-4	5.1	6.7	21.5	32.9	59.1	73.3	84.6	38.7
Primary 5-8	4.3	6.4	22.8	40.5	62.0	82.5	91.9	38.4
Secondary+	0.0	11.9	32.8	57.5	72.5	85.1	83.1	32.3
Wealth quintile								
Lowest	4.7	8.8	27.7	32.8	52.5	70.4	85.3	40.1
Second	8.3	7.6	22.3	37.0	55.7	75.4	86.7	39.5
Middle	1.6	5.7	19.9	32.4	57.8	70.3	84.2	38.1
Fourth	5.7	10.4	18.5	37.5	54.9	71.2	85.7	40.4
Highest	5.0	11.4	36.0	52.7	66.8	90.0	91.8	46.5
Total	5.1	8.8	24.7	38.5	57.7	74.9	86.5	40.9

Note: Women who have been sterilised are considered to want no more children.

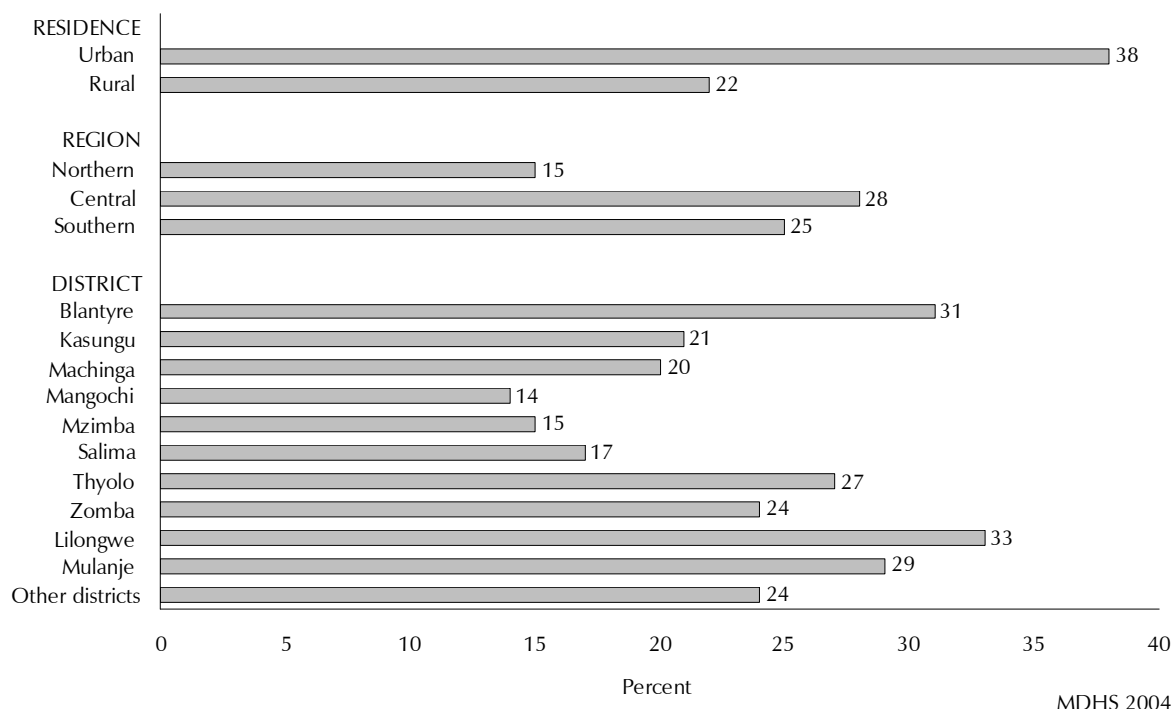
¹ Includes current pregnancy

The desire to limit childbearing appears to decline as the respondent's education increases; this is because more educated women have, on average, much lower fertility (i.e., lower average parity). As such, interpretation of the relationship between education level and fertility preferences needs to be based on comparisons within parity categories. For example, for women with 6 or more children, there are minimal educational differentials, but at parities 3-5, the desire to limit childbearing increases with women's education. There is no clear pattern with regard to the desire to limit childbearing by household wealth status, although women in the wealthiest quintile tend to be the most likely to report that they want to limit childbearing.

Figure 7.1 shows the percentage of women with two living children who want no additional children, according to urban-rural residence, region, district, and education level. Urban women, women in the Central and Southern Regions, and women with secondary or higher education are more likely than other women to want to stop childbearing. Women in Lilongwe, Blantyre,

Mulanje, and Thyolo are more likely than women in other districts to want to stop childbearing at parity two.

Figure 7.1 Percentage of Currently Married Women Who Have Two Children Who Want to End Childbearing



7.3 UNMET NEED FOR FAMILY PLANNING

Women who say either that they do not want any more children or that they want to wait two or more years before having another child, but in both cases are not using contraception, are considered to have an unmet need for family planning. Women who are using family planning methods are said to have a met need for family planning. Women with unmet need and those with met need together constitute the total demand for family planning, which can be categorised according to whether the need is for spacing or limiting births.

Table 7.3 presents estimates of currently married women with unmet need, met need, and total demand for family planning services according to intention to space or limit births and by background characteristics. Twenty-eight percent of women have an unmet need for family planning services: 17 percent of women have an unmet need for spacing and 10 percent of women have an unmet need for limiting births. In Malawi the total demand¹ for family planning among married women is 62 percent. This is about the same level of demand observed in the 2000 MDHS data (60 percent). At present, 55 percent of the demand for family planning is satisfied.

¹ The total demand is comprised of unmet need and met need. The combination of unmet and met need is not always equal to the total demand (see footnote 3, Table 7.3).

total demand and percentage of demand satisfied has increased (26 percent in 1992 to 55 percent in 2004). Although there has been considerable progress, much more needs to be done to satisfy women's demand for family planning.

Figure 7.2 Trend in Unmet Need for Family Planning, Total Demand, and Percentage of Demand Satisfied, Malawi 1992, 2000, and 2004

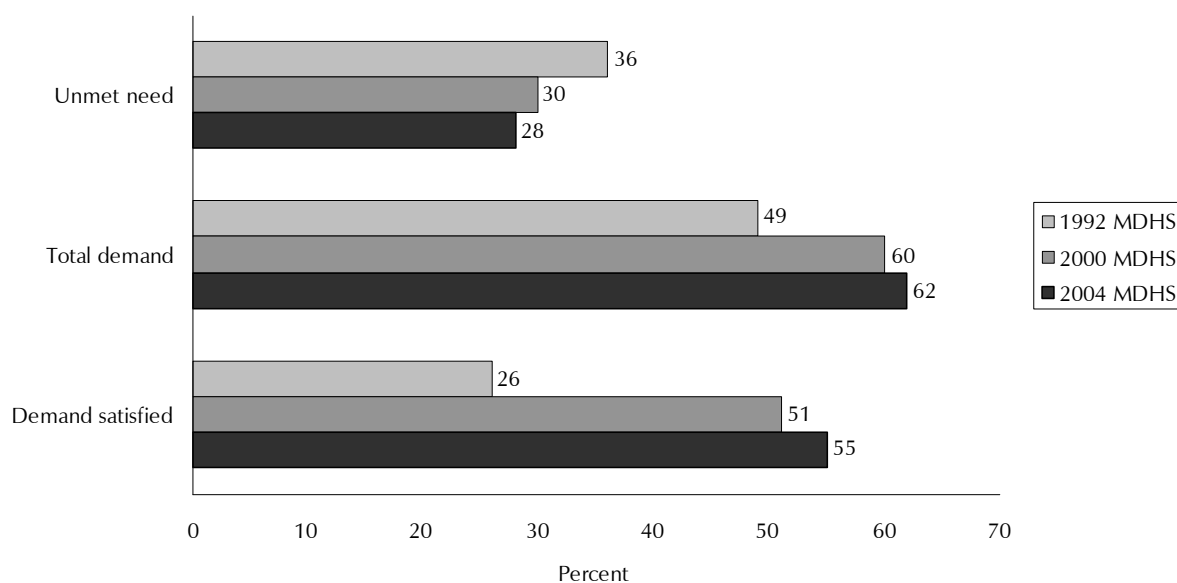


Table 7.3 shows that younger women have a higher unmet need for spacing births, while older women have a higher unmet need for limiting childbearing. While the overall demand for contraception is lowest among adolescents and women age 45-49 years, the percentage of demand satisfied is lowest among the adolescents (44 percent) and highest among women age 45-49 (72 percent). This indicates that young women are relatively underserved in Malawi.

Total unmet need for family planning services is greater among rural women (29 percent) than among urban women (23 percent). Unmet need is higher in the Central Region (30 percent) than in the Southern or Northern Regions (27 and 23 percent, respectively). There is no difference in the total demand for family planning services for rural and urban women (62 percent each), but urban women are more likely to have their demand satisfied than their rural counterparts (63 and 54 percent, respectively). The demand for family planning is higher among women in the Northern Region (68 percent) than among women in the Central and Southern Regions (65 and 57 percent, respectively). Sixty-six percent of women in the Northern Region have their demand satisfied compared with 54 percent of women in the Central Region and 53 percent in the Southern Region.

Unmet need is lower and met need is higher among women with some secondary or higher education when compared to women with less education. The overall demand for family planning services increases with the increasing level of education. Women with no education have a higher demand for family planning for limiting, while those with secondary or higher education have higher demand for family planning for spacing. The percentage of demand satisfied increases with the increasing level of education.

Among the districts, Salima and Mangochi have the highest levels of unmet need (33 percent) followed by Mulanje and other districts (29 percent). Total demand is highest among women in Kasungu and Lilongwe (67 percent each). Blantyre has the lowest unmet need (21 percent), while Machinga and Mangochi have the lowest levels of demand for family planning at 54 percent. The percentage of demand satisfied ranges from 39 percent in Salima to 67 percent in Mzimba.

7.4 IDEAL FAMILY SIZE

Information on what men and women believe to be their ideal family size was elicited through two questions. Respondents who had no children were asked, “If you could choose exactly the number of children to have in your whole life, how many would that be?” For respondents who had children, the question was rephrased as follows: “If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?” Some respondents, especially those for whom fertility control is an unfamiliar concept, may have some difficulty in answering this hypothetical question.

The results presented in Table 7.4 indicate that nearly all respondents were able to give a numeric response to this question: only 3-4 percent of men and women gave non-numeric responses like, “up to God” or “any number.” Slightly more than one-third of women and men (35 percent and 37 percent, respectively) said they would choose to have four children. The proportion of women and men who indicated that they would choose to have four or fewer children in Malawi has increased over time. This proportion was 38 percent for women and 45 percent for men in 1992, 64 percent for women and 69 percent for men in 2000, and 67 percent for women and 71 percent for men in 2004.

Table 7.4 Ideal number of children

Percent distribution of all women and men by ideal number of children, and mean ideal number of children for all women and for currently married women, according to number of living children, Malawi 2004

Desire for children	Number of living children ¹							Total
	0	1	2	3	4	5	6+	
WOMEN								
0	2.8	0.5	0.8	0.4	1.8	1.1	2.7	1.4
1	2.7	3.3	0.6	0.9	0.3	0.3	0.1	1.4
2	30.3	21.9	13.3	7.0	4.5	3.6	2.8	14.3
3	20.4	23.2	18.4	14.5	5.3	6.0	4.2	15.0
4	29.5	34.8	45.7	44.3	40.4	23.2	22.1	35.1
5	7.2	9.1	11.4	18.8	21.0	24.7	13.2	13.5
6+	3.3	5.4	7.8	12.1	23.5	36.9	46.4	15.8
Non-numeric responses	3.7	1.7	2.0	2.1	3.2	4.1	8.4	3.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,277	2,116	2,060	1,678	1,206	950	1,411	11,698
Mean ideal number children for²:								
All women	3.1	3.4	3.8	4.2	4.6	5.2	5.6	4.1
Number	2,193	2,080	2,019	1,642	1,168	911	1,292	11,304
Currently married women	3.4	3.5	3.8	4.2	4.6	5.2	5.6	4.3
Number	417	1,629	1,691	1,405	1,001	783	1,104	8,030
MEN								
0	1.0	0.0	0.0	0.0	1.1	0.0	0.2	0.5
1	0.8	0.2	0.1	0.0	0.0	0.0	0.5	0.4
2	21.0	18.6	11.2	5.9	4.8	3.0	4.3	13.4
3	28.9	29.6	19.7	16.0	3.5	6.2	6.3	20.1
4	32.4	37.2	46.9	45.8	43.0	34.5	27.4	36.5
5	9.3	10.0	15.2	17.5	17.5	26.5	14.5	13.4
6+	4.0	2.4	5.5	8.7	20.0	25.8	36.6	11.3
Non-numeric responses	2.6	2.1	1.4	6.1	10.1	4.0	10.2	4.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	1,253	391	403	319	270	218	407	3,261
Mean ideal number children for²:								
All men	3.4	3.5	4.1	4.1	4.6	4.8	5.5	4.0
Number	1,221	383	398	300	242	210	366	3,119
Currently married men	3.3	3.5	4.1	4.1	4.6	4.8	5.5	4.3
Number	158	338	377	291	238	204	362	1,969

¹ Includes current pregnancy

² Means are calculated excluding women/men giving non-numeric responses.

Survey findings show that women's actual and ideal number of children are correlated. The average ideal family size among women with one child is 3.4 children, compared with 5.6 children among women with six or more children. There are two principal reasons for this pattern. First, to the extent that women are able to implement their fertility desires, women who want smaller families will tend to achieve smaller families. Second, some women may have difficulty admitting that they would have had fewer children if they could begin childbearing again. Such women are likely to report their actual number of children as their preferred number. Despite this tendency to rationalise, the 2004 MDHS data provide evidence of unwanted fertility; close to half (45 percent) of the women with six or more children said that ideally they would have liked fewer than six children.

In general, men and women want families of a similar size. Currently married women and men want on average 4.3 children. For both men and women, there has been a decline of one child in the ideal family size since 1992. The average ideal family size for all women in 1992 was 5.1 children, in 2000 it was 5.0 children, and in 2004 it was 4.1 children. For all men, changes over time in ideal family size is sharper: it is 5.2 children in 1992, 4.8 children in 2000, and 4.0 children in 2004.

Table 7.5.1 shows the mean ideal number of children for all women by age, according to background characteristics. The mean ideal family size increases with age, from 3.2 children for women age 15-19 to 5.3 children for women age 40-49. At every age, rural women have larger family size desires than urban women: the average ideal number of children in the rural areas is 4.2 children, compared to 3.4 children in urban areas. Small regional variations are observed in ideal family size. However, a woman's education is strongly related to her ideal family size: as the woman's level of education increases, her desired family size decreases. There is also a decline in ideal family size as wealth increases. All patterns observed for women hold true for men as well (Table 7.5.2).

At the district level, the average ideal number of children for women ranges from 3.5 children for women in Blantyre to 4.5 children for women in Mangochi. For men, the corresponding figures are 3.5 children in Lilongwe to 4.5 children in Salima.

Table 7.5.1 Mean ideal number of children by background characteristics: women

Mean ideal number of children for all women, by age and background characteristics, Malawi 2004

Background characteristic	Age							All women
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Residence								
Urban	2.8	3.2	3.4	3.7	4.1	4.3	4.9	3.4
Rural	3.3	3.7	4.1	4.6	5.0	5.5	5.3	4.2
Region								
Northern	3.2	3.7	4.1	4.8	5.0	6.0	5.7	4.2
Central	3.3	3.5	3.9	4.4	4.7	5.2	4.9	4.0
Southern	3.2	3.6	4.0	4.4	5.1	5.1	5.4	4.1
District								
Blantyre	2.8	3.3	3.4	3.8	4.1	4.4	4.2	3.5
Kasungu	3.3	3.8	4.3	4.6	4.8	5.0	5.2	4.2
Machinga	3.4	3.9	4.5	4.7	5.4	4.7	5.4	4.4
Mangochi	3.4	3.9	4.7	4.7	5.7	5.7	5.9	4.5
Mzimba	3.0	3.6	4.0	4.6	4.8	5.6	5.9	4.1
Salima	3.6	3.9	4.3	4.6	4.8	5.6	5.6	4.3
Thyolo	3.1	3.7	4.1	4.8	4.9	5.1	5.6	4.1
Zomba	2.9	3.5	3.9	4.4	5.5	5.0	5.2	3.9
Lilongwe	3.1	3.2	3.6	4.1	4.3	4.6	4.0	3.6
Mulanje	3.2	3.6	3.9	4.3	4.7	5.0	5.2	4.0
Other districts	3.4	3.7	4.1	4.7	5.0	5.7	5.5	4.2
Education								
No education	3.5	4.0	4.4	4.8	5.3	5.6	5.3	4.8
Primary 1-4	3.3	3.9	4.2	4.5	5.0	5.3	5.3	4.2
Primary 5-8	3.3	3.6	4.0	4.4	4.6	5.2	5.4	3.9
Secondary+	2.9	3.1	3.1	3.5	3.7	4.2	3.9	3.1
Wealth quintile								
Lowest	3.3	3.9	4.1	4.6	5.0	6.1	5.3	4.3
Second	3.5	3.9	4.3	4.7	5.4	5.3	5.3	4.3
Middle	3.4	3.7	4.3	4.6	5.0	5.5	5.3	4.2
Fourth	3.2	3.5	4.0	4.6	5.0	5.3	5.3	4.1
Highest	2.8	3.1	3.4	3.8	4.1	4.5	4.9	3.5
Total	3.2	3.6	4.0	4.5	4.9	5.3	5.3	4.1

Table 7.5.2 Mean ideal number of children by background characteristics: men

Mean ideal number of children for all men, by age and background characteristics, Malawi 2004

Background characteristic	Age							All men
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Residence								
Urban	3.3	3.2	3.3	3.7	3.8	4.0	4.8	3.5
Rural	3.5	3.5	4.0	4.3	4.6	4.9	5.2	4.1
Region								
Northern	3.5	3.6	4.2	4.8	4.2	4.6	5.6	4.2
Central	3.6	3.3	3.8	3.9	4.5	4.6	4.6	3.9
Southern	3.4	3.5	3.8	4.1	4.5	5.0	5.4	4.0
District								
Blantyre	3.1	3.0	3.3	3.8	3.9	4.5	5.2	3.6
Kasungu	4.1	3.3	3.7	4.5	4.4	5.7	5.0	4.2
Machinga	3.5	3.6	3.6	4.2	4.6	5.0	4.9	4.0
Mangochi	4.3	3.7	4.1	4.3	4.0	5.0	4.2	4.2
Mzimba	3.3	3.5	3.8	4.3	4.6	4.9	5.3	4.0
Salima	4.2	3.2	4.4	4.3	5.1	5.1	5.6	4.5
Thyolo	2.9	3.5	3.7	4.2	4.3	4.7	6.8	4.0
Zomba	3.1	3.8	3.6	3.8	3.8	5.1	4.6	3.9
Lilongwe	3.3	3.3	3.1	3.5	4.5	4.1	3.9	3.5
Mulanje	3.3	3.5	3.9	4.1	5.2	5.2	3.7	4.1
Other districts	3.6	3.6	4.4	4.5	4.6	4.8	5.5	4.3
Education								
No education	4.0	3.6	4.1	4.3	4.5	4.7	4.8	4.4
Primary 1-4	3.9	3.8	4.6	4.4	5.1	5.2	5.6	4.5
Primary 5-8	3.4	3.4	3.9	4.4	4.5	4.9	5.1	4.0
Secondary+	3.0	3.3	3.3	3.5	3.4	3.9	4.6	3.4
Wealth quintile								
Lowest	4.1	3.8	4.2	4.6	4.7	4.8	4.7	4.3
Second	3.5	3.6	4.7	4.5	4.6	5.2	6.0	4.3
Middle	3.6	3.6	3.9	4.3	4.8	5.1	5.2	4.2
Fourth	3.4	3.4	3.6	4.3	4.6	4.7	4.7	4.0
Highest	3.2	3.2	3.1	3.5	3.7	3.9	5.0	3.4
Total	3.5	3.5	3.9	4.1	4.5	4.8	5.1	4.0

7.5 WANTED AND UNWANTED FERTILITY

There are two main ways of looking at the issue of unwanted fertility. In the first approach, responses to a question about children born in the five years preceding the survey (and any current pregnancy) are used to determine whether the pregnancy was planned (wanted then), wanted but at a later time (mistimed), or unwanted (not wanted at all). The answers to these questions provide some insight into the degree to which couples are able to control fertility. The second approach is asking the respondents their ideal family size. The difference between the actual fertility and the ideal family size is a measure of unwanted fertility.

Table 7.6 shows the percent distribution of births (including current pregnancy) in the five years preceding the survey by fertility planning status, according to birth order and mother's age at

birth. Sixty percent of the births in the five years preceding the survey were wanted at the time of conception, 21 percent were wanted later, and 20 percent were not wanted at all. The percentage of unwanted or mistimed births increases from 27 percent for first order births to 51 percent of fourth or higher order births. The proportion of births that were not wanted at all tends to increase with the woman's age. The percentage of recent births that were not wanted increased from 14 percent in 1992 to 22 percent in 2000, then declined to 20 percent in 2004. Paradoxically, there was a substantial increase in the use of contraception between 1992 and 2000, compared with between 2000 and 2004.

Birth order and mother's age at birth	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Wanted no more	Missing		
Birth order						
1	72.5	13.4	13.9	0.2	100.0	2,862
2	63.8	22.8	13.3	0.1	100.0	2,506
3	60.2	24.5	15.0	0.3	100.0	1,949
4+	49.3	22.0	28.7	0.1	100.0	4,867
Age at birth						
<20	67.1	17.6	15.1	0.2	100.0	2,433
20-24	63.9	21.3	14.6	0.2	100.0	4,177
25-29	58.5	23.8	17.5	0.2	100.0	2,536
30-34	52.8	20.5	26.7	0.0	100.0	1,648
35-39	42.5	20.8	36.7	0.0	100.0	911
40-44	41.5	11.4	46.9	0.3	100.0	401
45-49	44.7	8.2	47.0	0.0	100.0	78
Total	59.5	20.5	19.9	0.1	100.0	12,183

Table 7.7 shows the total wanted fertility rates and total actual fertility rates for the three years preceding the survey, by selected background characteristics. The wanted fertility rate is calculated in the same manner as the total fertility rate, but unwanted births are excluded from the numerator. For this purpose, unwanted births are defined as those that exceed the number considered ideal by the respondent. (Women who did not report a numeric ideal family size were assumed to want all their births). The rate represents the level of fertility that would have prevailed in the three years preceding the survey if all unwanted births were prevented. A comparison of the total wanted fertility rate and the actual total fertility rate suggests the potential demographic impact of the elimination of unwanted births. The total wanted fertility rate is 4.9 births per woman for Malawi as a whole, more than one child lower than the actual total fertility rate (6.0 births). The difference between wanted and actual total fertility is greatest among those subgroups of women who have the greatest unmet need for fertility control: rural women, less educated women, and women in the Central Region. In Mangochi, Machinga, and Kasungu Districts, the gap between wanted and actual total fertility is 1.2 children, 1.2 children, and 1.5 children, respectively. These districts have the highest total wanted fertility rate and total fertility rate.

An examination of women's mean ideal number of children according to women's status shows that the ability of a woman to participate in household decisionmaking, her opinion on justifications for refusing sex with her husband, and her opinion on justifications for wife beating are not associated with her ideal family size (data not shown).

Table 7.7 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Malawi 2004

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	3.3	4.2
Rural	5.2	6.4
Region		
Northern	5.0	5.6
Central	5.0	6.4
Southern	4.8	5.8
District		
Blantyre	3.4	4.8
Kasungu	5.5	7.0
Machinga	5.8	7.0
Mangochi	6.0	7.2
Mzimba	4.9	5.5
Salima	5.5	6.8
Thyolo	4.9	5.7
Zomba	4.5	5.3
Lilongwe	4.3	5.7
Mulanje	4.7	5.6
Other districts	5.1	6.3
Education		
No education	5.6	6.9
Primary 1-4	5.3	6.6
Primary 5-8	4.8	5.8
Secondary+	3.2	3.8
Wealth quintile		
Lowest	5.7	7.1
Second	5.6	7.0
Middle	5.2	6.5
Fourth	4.6	5.8
Highest	3.3	4.1
Total	4.9	6.0

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 4.2.

Macleod W. Mwale

This chapter reports on levels, trends, and differentials in infant and child mortality based on the 2004 MDHS. The information on infant and child mortality is relevant to evaluating the progress of health programmes and in monitoring the current demographic situation. In addition, the data can be used to identify subgroups of the population that have high mortality risks.

The data for the calculation of mortality rates are collected in the reproduction section of the Women’s Questionnaire. The section begins with aggregate questions about the total number of sons and daughters who live with the mother, the number who live elsewhere, and the number who have died. Then a detailed birth history is administered. For each live birth, information is obtained on the child’s name, date of birth, sex, whether the birth was single or multiple, and survivorship status. For living children, information about his or her age at last birthday and whether the child resides with his or her mother is obtained. For children who had died, the respondent is asked to provide the age at death.

8.1 DEFINITIONS

The mortality rates presented in this report are defined as follows:

Neonatal mortality (NN):	the probability of dying within the first month of life
Postneonatal mortality (PNN):	the difference between infant and neonatal mortality
Infant mortality (${}_1q_0$):	the probability of dying before the first birthday
Child mortality (${}_4q_1$):	the probability of dying between the first and the fifth birthday
Under-five mortality (${}_5q_0$):	the probability of dying between birth and the fifth birthday

All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

Population censuses and demographic surveys are the major sources of mortality data in Malawi, as in most developing countries. Vital registration is another potential source of mortality data. In Malawi, however, the vital registration data are incomplete in coverage and unrepresentative of the population. Mortality data from the Health Management Information System (HMIS) is not a suitable basis for the calculation of mortality rates from a population perspective because the system is facility-based and does not include data on deaths that occur outside the facilities. Given these circumstances, birth history data from surveys provide the most reliable estimates of infant and child mortality for Malawi.

8.2 METHODOLOGICAL CONSIDERATIONS

The DHS surveys estimate mortality rates for specific time periods preceding the survey, typically five-year periods, i.e., 0-4 years, 5-9 years, and so on. The estimates are based on births and infant and child deaths reported by women age 15-49 as of the interview date. Inherent in this methodology are possible biases arising from incomplete and possibly unrepresentative data.

Since only surviving women age 15-49 are interviewed, no data are available for the children of women who have died. In this case, mortality estimates will be biased if the mortality experience of children born to surviving and nonsurviving women differs. Of course, any method of estimating childhood mortality rates that relies on retrospective reporting of events by mothers is susceptible to bias from this source. The higher the level of adult female mortality and the longer ago the time periods for which mortality is estimated, the greater is the potential for bias.

Another methodological constraint arises from the fact that women older than age 49 at the time of the survey are not interviewed and thus cannot contribute information on the exposure and deaths of their children for periods preceding the survey. This censoring of information and the resulting potential for bias becomes more severe as mortality estimates are made for time periods more distant prior to the survey. To reduce the effect of these methodological limitations, estimation of infant and child mortality in this report is restricted to the period 15 years prior to the survey.

8.3 ASSESSMENT OF DATA QUALITY

Potential data collection problems include misreporting dates of birth, misreporting age at death, and underreporting of events. It is possible to test the birth history data collected in the 2004 MDHS for these kinds of errors. The testing involves checking the internal consistency of the collected data, essentially determining if the data conform to expected patterns.

8.3.1 Misreporting Dates of Birth

The 2004 MDHS Women's Questionnaire includes two sections on maternal and child health, in which data are collected on antenatal, delivery, and postnatal care of the mother for recent births and on many health and nutrition issues for these children (see Chapters 9 and 10). These sections of the questionnaire must be administered for each birth which occurs after some cut-off date, typically set to January of the fifth calendar year prior to a survey. In the case of the 2004 MDHS, the cut-off date was January 1999.

Interviewers in DHS surveys can lessen their workload by recording births that actually occur after the cut-off date as occurring before that date. This type of birth transference occurs in many DHS surveys. In the case of the 2004 MDHS, the occurrence of birth transference can be detected by inspecting the reported number of births in each calendar year before and after the cut-off date for the health sections. Appendix Table C.4 shows the relevant data. Substantial misreporting of dates of birth is evident in terms of the calendar year pattern of reported events: 1,575 total births for 1999 and 2,143 births for 1998 (an increase of 36 percent). Misreporting of dates of birth for nonsurviving children is even more severe: 233 for 1999 and 424 for 1998 (an increase of 82 percent).

In terms of mortality analysis, what is important is the extent to which this birth transference distorts the time period in which child deaths occur. To the extent that birth transference results in a

shortfall of deaths in the five-year period prior to the survey, the time trend of mortality estimates will be distorted; mortality rates for the most recent five years before the survey will tend to be underestimated, while the estimates for the earlier five-year period will tend to be overestimated. This is the case with the MDHS 2004.¹

8.3.2 Misreporting Age at Death

Misreporting age at death can distort the age pattern of mortality. Of particular concern is the rounding of reported ages at death so that some deaths which actually occur in late infancy are reported as deaths at one year of age. This type of misreporting would tend to underestimate infant mortality rates and overestimate child mortality rates. To avoid this problem, interviewers in DHS surveys are instructed to collect age-at-death data in terms of months of age for children that die after the first month of life but before two years of age. If a respondent reports the age at death as age one, the interviewer must probe to determine the number of months that the child lived, being particularly careful to determine if the child died before or after the first birthday. This procedure of data collection is designed to minimise the misreporting of age at death and, if digit preference occurs in reported ages at death, it will be obvious from a frequency distribution of deaths by age in months.

Appendix Table C.6 shows reported deaths by age at death in months (0 through 23 months of age) and the number of deaths reported as occurring at age one year.² For the 15-year period immediately preceding the 2004 MDHS, the number of deaths reported at one year of age (422) exceeds the total number reported at 12 through 23 months of age (403), indicating that interviewers did not follow standard DHS procedures and making it impossible to assess age at death misreporting by inspection of the distribution of deaths by months of age.

However, the possibility of misreporting late infant deaths as deaths at one year of age can be indirectly assessed by comparison of the pattern of mortality between the first and the fifth birthday from the three DHS surveys conducted in Malawi (1992, 2000, and 2004). In each of the three surveys, the age pattern of mortality is similar, with infant mortality rates exceeding child mortality rates by between 10 and 24 percent. The absence of a significant change in the age pattern of mortality over the three surveys suggests that, relative to the earlier surveys, substantial age at death misreporting did not occur in the 2004 MDHS.

8.3.3 Underreporting of Deceased Children

Underreporting of the births of deceased children (and their subsequent deaths) is always a concern when collecting birth histories of women. The women may not wish to report such sad events, and interviewers may fail to record some of these events for the five-year period preceding the survey in order to avoid asking questions contained in the maternal and child health sections of the questionnaire.

When there is underreporting of births of deceased children, it is usually most pronounced in early infancy. If there is severe underreporting of neonatal deaths, the result would be an unusu-

¹The extent to which the time trend of mortality is distorted by birth transference could be investigated by more detailed analysis.

²The number of deaths at one year of age should be minimal in DHS surveys because of the DHS procedure of probing to determine age at deaths in months when a respondent initially reports one year as the age at death.

ally low ratio of neonatal deaths to all infant deaths. Appendix Table C.6 indicates that the percentage of neonatal deaths relative to all infant deaths was lower in the five-year period immediately preceding the survey (39 percent) than in the periods 5-9 years (43 percent) and 10-14 years preceding the survey (42 percent). These differences are not great, but the pattern is consistent with the under-reporting of deceased children in the five-year period immediately preceding the survey. This is especially curious since the low ratio occurs in a time period of falling infant mortality, when neonatal mortality is expected to be a greater component of infant mortality.

The assessment of data quality has found that standard DHS procedures were not followed in the collection of age-at-death data; that birth dates were misreported (especially in the case of non-surviving children), resulting in the transference of births out of the five-year period immediately preceding the survey; and that the ratio of neonatal to infant mortality is unexpectedly lower for the five-years preceding the survey than for earlier time periods. For these reasons the mortality estimates from the 2004 MDHS must be interpreted with caution.

8.4 LEVELS AND TRENDS OF EARLY CHILDHOOD MORTALITY

Table 8.1 presents estimates of childhood mortality for three five-year periods preceding the survey. For the most recent five-year period, corresponding approximately to 2000-2004, the infant mortality rate was 76 per 1,000 live births, and child mortality was 62 per 1,000, resulting in an overall under-five mortality rate of 133 per 1,000 live births.

During the 15-year period preceding the survey, the estimates indicate that under-five mortality has declined by 30 percent (from 190 deaths per 1,000 to 133 per 1,000). Infant mortality declined by 27 percent (from 104 per 1,000 to 76 per 1,000). Neonatal mortality, however, declined by 36 percent (from 42 per 1,000 to 27 per 1,000).

Years preceding the survey	Approximate calendar period	Neonatal mortality (NN) ¹	Postneonatal mortality (PNN)	Infant mortality (${}_1q_0$)	Child mortality (${}_4q_1$)	Under-five mortality (${}_5q_0$)
0-4	2000-2004	27	49	76	62	133
5-9	1995-1999	49	64	112	84	187
10-14	1990-1994	42	62	104	96	190

¹Computed as the difference between the infant and neonatal mortality rates

The fact that the largest age-specific decline in mortality occurs in the neonatal period is inconsistent with the pattern of decline usually observed in developing countries. The usual pattern is greater decline in postneonatal mortality and child mortality than in neonatal mortality, because some of the causes of neonatal mortality (preterm delivery, injury at delivery, and congenital malformations) are the last to be alleviated in a developing country. Thus it is possible that births ending in neonatal deaths were underreported for the period immediately preceding the survey, as is suggested in the data quality assessment in Section 8.3.3.

There are many causes of childhood mortality in the developing world, and their impact varies from one country to another. Similarly, increases and decreases in mortality for different age groups from infancy through early childhood can be a result of many factors. A detailed analysis of these factors is beyond the scope of this report, however, looking at the three MDHS surveys (1992, 2000, and 2004), it is apparent there has been little change in the factors typically associated with decreases in neonatal mortality. Among women giving birth in the five years preceding each survey, the percentage receiving antenatal care from a doctor or nurse/midwife was about the same (90, 91 and 93 percent, respectively), the percentage receiving tetanus toxoid during pregnancy was unchanged (85 percent in all three surveys), and the proportion of deliveries assisted by a doctor or nurse/midwife changed little (55, 56, and 57 percent) (see Chapter 9).

8.5 SOCIOECONOMIC DIFFERENTIALS IN CHILDHOOD MORTALITY

The 2004 MDHS data allows the estimation of mortality levels by socioeconomic indicators (Table 8.2). A ten-year period (approximately 1995-2004) is used to calculate the mortality estimates in order to reduce the sampling variability for the subclasses of the indicators.

Urban mortality rates are generally lower than rural rates; the under-five mortality rate is 116 per 1,000 in urban areas compared to 164 per 1,000 in rural areas. Comparing the three regions, the Northern Region has lower under-five mortality (120 per 1,000 live births), than either the Central (162 per 1,000) or the Southern Regions (164 per 1,000). Similarly, the infant mortality rate is lowest in the Northern Region (82 per 1,000), compared with either the Central Region (90 per 1,000) or the Southern Regions (98 per 1,000). These regional differences in mortality were also observed in the 1992 MDHS and the 2000 MDHS.

Table 8.2 also presents childhood mortality rates for 10 oversampled districts. Under-five mortality is lowest in Mzimba (112 per 1,000) and Machinga (130 per 1,000) and is highest in Mulanje (221 per 1,000), Kasungu (192 per 1,000), and Thyolo (187 per 1,000). For infant mortality, the lowest rates are found in Lilongwe (73 per 1,000) and Machinga (78 per 1,000), while the highest rates are also observed in Mulanje (145 per 1,000), Thyolo (119 per 1,000), and Kasungu (117 per 1,000).

The 2004 MDHS shows the same relationship between mother's education and child survival as the 2000 MDHS. For every age interval, higher levels of education are generally strongly associated with lower mortality risks. The same is true for the wealth index.

Table 8.2 Early childhood mortality rates by background characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by background characteristic, Malawi 2004

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) ¹	Infant mortality (₁ q ₀)	Child mortality (₄ q ₁)	Under-five mortality (₅ q ₀)
Residence					
Urban	22	38	60	60	116
Rural	39	59	98	74	164
Region					
Northern	39	44	82	41	120
Central	34	56	90	80	162
Southern	39	59	98	73	164
District					
Blantyre	46	43	90	69	153
Kasungu	56	61	117	85	192
Machinga	33	45	78	57	130
Mangochi	45	59	104	70	167
Mzimba	38	41	80	36	112
Salima	25	59	84	76	154
Thyolo	43	76	119	77	187
Zomba	31	53	84	66	144
Lilongwe	21	52	73	78	145
Mulanje	55	89	145	89	221
Other districts	36	55	91	74	158
Education					
No education	36	65	101	89	181
Primary 1-4	39	61	101	77	170
Primary 5-8	38	46	85	59	139
Secondary+	25	38	63	25	86
Wealth quintile					
Lowest	36	73	109	83	183
Second	41	58	100	79	171
Middle	40	55	95	82	168
Fourth	36	54	89	62	146
Highest	29	37	66	49	111

¹Computed as the difference between the infant and neonatal mortality rates

8.6 BIODEMOGRAPHIC DIFFERENTIALS IN CHILDHOOD MORTALITY

This section looks at the association between biodemographic factors and childhood mortality levels (Table 8.3). With the exception of the mother's perception of birth size, mortality rates are presented for the ten-year period preceding the survey.

As is the case in most populations, male children are more likely to die before reaching the age of five (166 per 1,000 live births) than female children (149 per 1,000).

The mother's age at birth is also associated with a child's chances of survival. Children born to younger mothers (under 20 years of age) and older mothers (40 years and older) have higher mor-

tality than children born to mothers in the middle reproductive years (ages 20-39). Children of mothers under age of 20 are especially vulnerable, particularly in the first month of life. Neonatal mortality is 56 deaths per 1,000 among children of teenage mothers, compared with 29 per 1,000 among children of women age 20-29.

There is a strong association between the length of the preceding birth interval and mortality. Under-five mortality of children born following a short birth interval (less than two years) is 67 percent greater than for children born after an interval of 2 years and 162 percent greater than for children born after an interval of 4 years. This relative mortality disadvantage of children born after a short birth interval is even more pronounced during the neonatal period.

In the 2004 MDHS, mothers were also asked their perception of the size of their child at birth for births occurring in the five years preceding the survey. The findings indicate children perceived by their mothers to be small or very small were much more likely to die in the first year of life (121 per 1,000 live births) than those perceived as average or large in size (65 per 1,000 live births).

Table 8.3 Early childhood mortality rates by demographic characteristics					
Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by demographic characteristics, Malawi 2004					
Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) ¹	Infant mortality (₁ q ₀)	Child mortality (₄ q ₁)	Under-five mortality (₅ q ₀)
Child's sex					
Male	42	55	97	76	166
Female	32	56	88	67	149
Mother's age at birth					
<20	56	66	121	78	190
20-29	29	53	82	72	148
30-39	34	54	88	63	145
40-49	48	44	92	76	161
Birth order					
1	47	61	108	72	172
2-3	33	53	87	71	151
4-6	26	52	78	69	141
7+	51	63	114	80	185
Previous birth interval²					
<2 years	62	92	154	112	249
2 years	31	54	85	70	149
3 years	22	34	56	57	110
4+ years	20	35	55	43	95
Birth size³					
Small/very small	52	69	121	na	na
Average or larger	21	44	65	na	na

na = Not applicable
¹Computed as the difference between the infant and neonatal mortality rates
²Excludes first-order births
³Rates for the five-year period before the survey

8.7 CHILDHOOD MORTALITY BY WOMEN'S STATUS

The ability to access information, make decisions, and act effectively in their own interest, or the interest of those who depend on them, are essential aspects of women's empowerment. If women, the primary caretakers of children, are empowered, the health and survival of their infants is likely to be enhanced. Table 8.4 shows infant and child mortality rates in relation to women's status as measured by three empowerment indicators: participation in household decisionmaking, attitude towards a woman being able to refuse to have sex with her husband, and attitude towards wife beating.

There is no consistent relationship between levels of mortality and the first two empowerment indicators: participation in household decisionmaking and number of reasons justifying a woman's refusal to have sex with her husband. However, there does appear to be a relationship in the case of attitude towards wife beating. For example, among women reporting fewer reasons justifying wife beating (i.e., more empowered women) under-five mortality is lower (approximately 150 per 1,000) than among women reporting more reasons justifying wife beating (approximately 180 per 1,000).

Table 8.4 Early childhood mortality rates by women's status					
Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by women's status indicators, Malawi 2004					
Women's status indicators	Neonatal mortality (NN)	Postneonatal mortality (PNN) ¹	Infant mortality (₁ q ₀)	Child mortality (₄ q ₁)	Under-five mortality (₅ q ₀)
Number of decisions in which woman has final say²					
0	38	51	89	75	158
1-2	36	59	95	79	166
3-4	37	48	85	58	138
5	38	61	99	68	160
Number of reasons to refuse sex with husband					
0	28	57	85	79	157
1-2	33	61	94	75	162
3-4	39	54	93	70	157
Number of reasons wife beating is justified					
0	36	56	92	71	156
1-2	39	49	89	66	149
3-4	37	69	106	78	176
5	37	61	98	95	184

¹Computed as the difference between the infant and neonatal mortality rates
²Either by herself or jointly with others

8.8 PERINATAL MORTALITY

The 2004 MDHS survey also asked women to report on their pregnancy losses in the five-year period preceding the survey and the gestational age of each lost pregnancy. In this report, perinatal deaths include pregnancy losses occurring after seven completed months of gestation (stillbirths) and deaths to live births less than seven days old (early neonatal deaths). The perinatal mortality rate is the sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies reaching seven months' gestation. The causes of stillbirths and early neonatal deaths overlap, and examining just one or the other can understate the true level of mortality around delivery. For this reason, stillbirths and early neonatal mortality are combined and examined together.

Table 8.5 shows the number of stillbirths, the number of early neonatal deaths, and the perinatal mortality rates for the five-year period preceding the survey by background characteristics. The perinatal mortality rate is 34 per 1,000. This is lower than the rate measured in the 2000 MDHS (46 per 1,000).

By demographic characteristics, there is a clear pattern of elevated perinatal mortality among women younger than 20 and 40 and older. First pregnancies and pregnancies with a short preceding interpregnancy interval are also at an elevated risk of perinatal mortality. First pregnancies and pregnancies with an interpregnancy interval of less than 27 months have a perinatal risk of approximate 46 per 1,000, as opposed to a risk of approximately 25 per 1,000 when the interpregnancy interval is 27 months or longer.

Differences in perinatal mortality by urban-rural residence are substantial. The urban perinatal mortality rate (15 per 1,000) is less than half that of the rural rate (37 per 1,000). Differences by district range from 15 per 1,000 (Lilongwe) to 40 per 1,000 (Mulanje). Differences by region and mother's characteristics are much less pronounced.

Table 8.5 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate (per 1,000 pregnancies) for the five-year period preceding the survey, by background characteristics, Malawi 2004

Background characteristic	Number of stillbirths ¹	Number of early neonatal deaths ²	Perinatal mortality rate ³	Number of pregnancies of 7+ months duration
Mother's age at birth				
<20	45	63	48	2,249
20-29	73	91	28	5,963
30-39	39	42	35	2,293
40-49	11	8	(43)	434
Previous pregnancy interval in months				
First pregnancy <15	51	62	46	2,465
15-26	7	12	(47)	390
27-38	38	53	45	2,028
39+	33	36	24	2,902
39+	38	42	25	3,155
Residence				
Urban	9	13	15	1,434
Rural	159	191	37	9,505
Region				
Northern	24	31	40	1,369
Central	72	75	32	4,566
Southern	72	99	34	5,005
District				
Blantyre	7	12	26	731
Kasungu	10	15	48	536
Machinga	7	11	39	447
Mangochi	12	15	42	648
Mzimba	10	16	39	686
Salima	4	4	25	316
Thyolo	7	12	33	582
Zomba	7	14	39	552
Lilongwe	12	11	15	1,501
Mulanje	7	16	50	444
Other districts	84	78	36	4,498
Education				
No education	48	46	32	2,951
Primary 1-4	63	59	39	3,165
Secondary 5-8	47	79	34	3,685
Secondary +	9	20	26	1,136
Wealth quintile				
Lowest	28	23	24	2,127
Second	59	52	45	2,485
Middle	31	56	35	2,477
Fourth	25	47	34	2,116
Highest	26	26	30	1,735
Total	168	204	34	10,939

Note: Rates in parentheses are based on 250-499 pregnancies

¹Stillbirths are fetal deaths in pregnancies lasting seven or more months.

²Early neonatal deaths are deaths at age 0-6 days among live-born children.

³The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration.

8.9 HIGH-RISK FERTILITY BEHAVIOUR

Numerous studies have demonstrated a strong relationship between a woman's pattern of fertility and her children's survival. Table 8.6 shows the distribution of children born in the five years preceding the survey (approximately calendar years 2000-2004) by category of increased risk of dying due to the woman's fertility behaviour, i.e., in terms of being relatively young or relatively old at the time of birth (less than age 18 or age 35 or older), having a high birth order (birth order 4 or higher), or having a short preceding birth interval (less than 24 months).

Column one of Table 8.6 shows the percentage of births during the five years before the survey that fall into various risk categories. More than half of all births (53 percent) fall into a single or multiple high-risk category, with 16 percent falling into a multiple high-risk category.

The risk ratios for categories of births in the last five years are presented in column two: the risk ratio is the ratio of the proportion dead among live births in a specific high-risk category to the proportion dead among births not in any high-risk category. Two points merit comment. First, in Malawi, high birth order as a single-risk factor is not associated with higher mortality risk. The only single high-risk factors leading to heightened mortality risk are young age at birth and short birth interval. Second, short birth interval coupled with another high-risk factor always results in a risk ratio in excess of 2.0. This latter finding underscores the need to reduce, through greater use of contraception, the number of closely spaced births in Malawi.

Column three of Table 8.6 indicates the potential for high-risk births among currently married, non-sterilised women at the time of the survey. The table shows the distribution of risk categories into which a birth would fall if all of these women conceived at the time of the survey. Thirty-five percent of married women have the potential to give birth to a child that falls into a multiple high-risk category.

Table 8.6 High-risk fertility behaviour

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Malawi 2004

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women ¹
	Percentage of births	Risk ratio	
Not in any high-risk category	30.0	1.00	25.1 ^a
Unavoidable risk category			
First order births between ages 18 and 34 years	16.8	1.21	6.0
Single high-risk category			
Mother's age <18	7.2	1.76	0.9
Mother's age >34	0.3	(0.94)	2.1
Birth interval <24 months	5.3	1.49	12.9
Birth order >3	24.1	0.97	17.9
Subtotal	36.9	1.20	33.9
Multiple high-risk category			
Age <18 & birth interval <24 months ²	0.4	3.45	0.4
Age >34 & birth interval <24 months	0.0	na	0.0
Age >34 & birth order >3	10.1	0.90	16.9
Age >34 & birth interval <24 months & birth order >3	1.2	2.95	4.8
Birth interval <24 months and birth order >3	4.5	2.12	13.0
Subtotal	16.2	1.46	35.0
In any avoidable high-risk category	53.2	1.28	68.9
Total	100.0	na	100.0
Number of births	10,773	na	8,312

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births *not in any high-risk category*.

Figures in parentheses are based on 25-49 unweighted cases.

na = Not applicable

¹Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.

²Includes the category age <18 and birth order >3

^aIncludes sterilised women

Ann Phoya and Sophie Kang'oma

This chapter presents the 2004 MDHS findings on maternal and child health in Malawi. Topics discussed include the utilisation of maternal and child health services; maternal and childhood immunisations; common childhood illnesses and their treatment; barriers to obtaining health care; ability to negotiate sex; and attitudes towards family violence. Combined with information on childhood mortality, this information can be used to identify women and children who are at risk because of nonuse of health services and to provide information that would assist in planning interventions to improve maternal and child health. The results presented in the following sections are based on data collected from mothers on all live births that occurred in the five years preceding the survey.

9.1 ANTENATAL CARE

Table 9.1 shows the percent distribution of women who had a live birth in the five years preceding the survey and used antenatal care (ANC) services. Overall, there has been no change in the coverage of ANC from a medical professional since 2000 (93 percent). Most women receive ANC from a nurse or a midwife (82 percent); 10 percent of pregnant women went to see a doctor for ANC.

Maternal age at birth and the birth order of the child are not strongly related to the practice of ANC. Urban women are more likely to have seen a health professional for antenatal services than women living in rural areas, though rural women are slightly more likely to have seen a doctor. The use of antenatal services is strongly associated with level of education and wealth. While 8 percent of women with no education had no antenatal care, the proportion among women with some secondary or higher education is only 2 percent. However, women with no education are slightly more likely than women with secondary education to receive antenatal care from a doctor/clinical officer (10 percent compared with 8 percent). This is the reverse of the situation observed in the 2000 DHS, where women with secondary or higher education are slightly more likely than women with less education to receive care from a doctor/clinical officer (10 percent compared with 9 percent).

Use of antenatal services varies among districts. Women receive ANC from health care providers most commonly in Mzimba, Blantyre, Salima, and Zomba (96 to 98 percent). However, lack of any antenatal care is as high as 6 to 7 percent in Lilongwe and Mangochi. The high level of nonuse of antenatal services in Lilongwe is also recorded in the 2000 MDHS (7 percent). Variations in the utilisation of doctors for antenatal care continue to persist among districts. As reported in the 2000 MDHS, women in Salima are more likely to go to a doctor for antenatal care than women in other districts (28 percent). However, this observation should be viewed with caution because the definition among respondents of what constitutes a “doctor” is loose and may vary by locality.

Benefits of antenatal care in influencing outcomes of pregnancy depend to a large extent on the timing of the antenatal care as well as the content and quality of the services provided. In

Malawi, women are advised to have a minimum of four ANC visits spread throughout the pregnancy, with the first visit in the first trimester.

Table 9.1 Antenatal care
Percent distribution of women who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Malawi 2004

Background characteristic	Doctor/clinical officer	Nurse/midwife	Patient attendant	Traditional birth attendant/other	No one	Missing	Total	Number of women
Age at birth								
<20	10.0	82.5	0.9	2.3	4.3	0.1	100.0	1,293
20-34	10.0	82.4	1.0	1.8	4.6	0.2	100.0	4,979
35-49	8.8	81.9	1.2	2.4	5.5	0.2	100.0	1,000
Birth order								
1	10.1	83.7	0.5	1.8	3.9	0.0	100.0	1,518
2-3	9.8	83.1	1.1	1.8	4.0	0.3	100.0	2,659
4-5	10.0	81.7	1.1	1.9	5.0	0.2	100.0	1,622
6+	9.5	80.3	1.1	2.8	6.1	0.2	100.0	1,473
Residence								
Urban	6.8	90.8	0.3	0.1	1.9	0.1	100.0	1,041
Rural	10.3	80.9	1.1	2.3	5.1	0.2	100.0	6,231
Region								
Northern	8.3	87.1	0.4	0.6	3.5	0.1	100.0	924
Central	11.4	79.5	0.5	1.7	6.6	0.3	100.0	2,959
Southern	8.9	83.5	1.6	2.6	3.2	0.1	100.0	3,389
District								
Blantyre	5.1	92.2	0.2	1.4	1.1	0.0	100.0	520
Kasungu	18.2	72.4	0.7	3.8	4.8	0.1	100.0	330
Machinga	4.7	81.1	7.6	4.0	2.3	0.3	100.0	284
Mangochi	17.9	73.3	1.1	1.8	6.0	0.0	100.0	411
Mzimba	5.8	91.0	0.4	0.2	2.5	0.1	100.0	464
Salima	28.1	68.4	0.0	0.8	2.5	0.2	100.0	199
Thyolo	10.0	80.9	0.2	5.2	3.4	0.3	100.0	386
Zomba	6.0	89.7	1.4	2.2	0.6	0.2	100.0	389
Lilongwe	3.4	88.3	0.0	1.4	6.5	0.5	100.0	1,013
Mulanje	10.4	79.0	1.1	7.0	1.9	0.8	100.0	296
Other districts	11.1	80.2	1.0	1.4	6.1	0.1	100.0	2,981
Education								
No education	10.3	76.2	1.6	3.2	8.4	0.2	100.0	1,885
Primary 1-4	11.0	80.2	0.9	2.8	4.8	0.3	100.0	2,021
Primary 5-8	9.1	86.3	0.7	1.0	2.7	0.2	100.0	2,485
Secondary+	8.1	89.3	0.5	0.3	1.7	0.2	100.0	880
Wealth quintile								
Lowest	10.6	78.1	1.0	2.5	7.4	0.4	100.0	1,380
Second	11.0	78.8	1.6	2.7	5.5	0.3	100.0	1,579
Middle	10.4	80.7	1.0	2.6	5.0	0.2	100.0	1,610
Fourth	9.0	85.9	0.7	1.2	3.1	0.0	100.0	1,432
Highest	7.7	89.5	0.3	0.7	1.8	0.1	100.0	1,271
Total	9.8	82.3	1.0	2.0	4.6	0.2	100.0	7,271

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.

Table 9.2 presents information about the number and timing of ANC visits. For 57 percent of births, mothers meet the recommended number of four or more antenatal care visits. This is the same level reported in the 2000 MDHS. Women in urban areas are more likely than rural women to go for antenatal care visits.

Messages regarding the importance of initiating antenatal care in the first trimester have not made a significant impact on the timing of antenatal care. Table 9.2 shows that only 8 percent of women initiated antenatal care before the fourth month of pregnancy, about the same as found in the 2000 MDHS (7 percent). While urban women make more frequent visits for antenatal care than rural women, they initiate the ANC visit at about the same time as their rural counterparts (5.8-5.9 months). The persistent delay in initiating antenatal care indicates that a large proportion of pregnant women in Malawi miss out on intended benefits of early antenatal care services.

Table 9.2 Number of antenatal care visits and timing of first visit			
Percent distribution of women who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent birth, and by the timing of the first visit according to residence, Malawi 2004			
Number and timing of ANC visits	Residence		Total
	Urban	Rural	
Number of ANC visits			
None	1.9	5.1	4.6
1	3.4	2.3	2.5
2-3	28.7	36.2	35.2
4+	65.2	55.7	57.1
Don't know/missing	0.9	0.6	0.7
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	1.9	5.1	4.6
<4	9.4	7.4	7.7
4-5	46.3	43.0	43.5
6-7	39.3	41.5	41.2
8+	3.1	2.7	2.8
Don't know/missing	0.0	0.3	0.3
Total	100.0	100.0	100.0
Median months pregnant at first visit (for those with ANC)	5.8	5.9	5.9
Number of women	1,041	6,231	7,271

In addition to the number and timing of ANC visits, another important aspect of antenatal care is the content and quality of services. Women who received antenatal care in the five years preceding the survey were asked what services they received. The limited content of antenatal care services in Malawi indicates that women are not getting the care that would assist in the identification and management of complications that can have a negative impact on the mother and her baby.

Table 9.3 shows that seven in ten women report that they were told about pregnancy complications and where to go in case of problems during pregnancy. The most frequent checks for

There are variations in the provision of services during antenatal visits across subgroups of women. In general, women in urban areas, in the Northern Region, more educated women and women in the highest wealth quintile are more likely than other women to receive quality care during pregnancy. At the district level, the content of antenatal care varies widely. Blood pressure measurements were taken for only 63 percent of women in Machinga. The collection of blood and urine samples is even less common. The collection of blood samples ranges from 14 percent of women in Kasungu to 58 percent in Zomba. Women in Zomba seem to get the best antenatal care services based on the types of checks during pregnancy.

Table 9.4 shows that 85 percent of women who had a birth in the five years preceding the survey report that they received at least one tetanus toxoid injection during the pregnancy. The coverage of tetanus toxoid injection has not changed since 1992 (85-86 percent). Table 9.4 also shows that only 66 percent of women had two or more tetanus toxoid injections. This figure is lower than that reported in the 1992 MDHS (73 percent).

Table 9.4 Tetanus toxoid injections

Percent distribution of women who had a live birth in the five years preceding the survey by number of tetanus toxoid injections received during pregnancy for the most recent birth, according to background characteristics, Malawi 2004

Background characteristic	None	One injection	Two or more injections	Don't know/missing	Total	Number of women
Age at birth						
<20	12.2	16.5	70.7	0.6	100.0	1,293
20-34	14.8	19.3	65.4	0.6	100.0	4,979
35-49	18.3	16.4	64.7	0.7	100.0	1,000
Birth order						
1	11.1	15.6	72.8	0.5	100.0	1,518
2-3	12.7	19.6	66.8	0.8	100.0	2,659
4-5	17.5	20.2	62.1	0.1	100.0	1,622
6+	19.4	17.0	62.8	0.8	100.0	1,473
Residence						
Urban	9.6	18.5	71.5	0.4	100.0	1,041
Rural	15.7	18.4	65.3	0.6	100.0	6,231
Region						
Northern	14.2	18.3	67.2	0.3	100.0	924
Central	15.2	16.5	67.6	0.6	100.0	2,959
Southern	14.6	20.0	64.7	0.6	100.0	3,389
District						
Blantyre	15.0	16.4	67.7	0.8	100.0	520
Kasungu	20.9	17.5	60.4	1.2	100.0	330
Machinga	17.4	20.2	62.2	0.2	100.0	284
Mangochi	9.0	16.1	74.2	0.7	100.0	411
Mzimba	14.8	16.6	68.4	0.2	100.0	464
Salima	7.7	16.8	75.2	0.4	100.0	199
Thyolo	19.0	20.7	60.1	0.2	100.0	386
Zomba	11.2	21.7	66.5	0.6	100.0	389
Lilongwe	14.5	16.4	68.9	0.2	100.0	1,013
Mulanje	16.2	24.2	59.2	0.4	100.0	296
Other districts	15.0	18.7	65.5	0.8	100.0	2,981
Education						
No education	18.6	16.0	64.7	0.6	100.0	1,885
Primary 1-4	14.9	19.2	65.3	0.6	100.0	2,021
Primary 5-8	13.8	20.0	65.8	0.4	100.0	2,485
Secondary+	9.3	17.0	72.7	1.1	100.0	880
Wealth quintile						
Lowest	15.7	19.8	64.2	0.3	100.0	1,380
Second	16.6	16.8	65.7	0.8	100.0	1,579
Middle	14.8	18.6	66.1	0.4	100.0	1,610
Fourth	14.8	17.5	67.2	0.5	100.0	1,432
Highest	11.5	19.6	68.0	0.9	100.0	1,271
Total	14.8	18.4	66.2	0.6	100.0	7,271

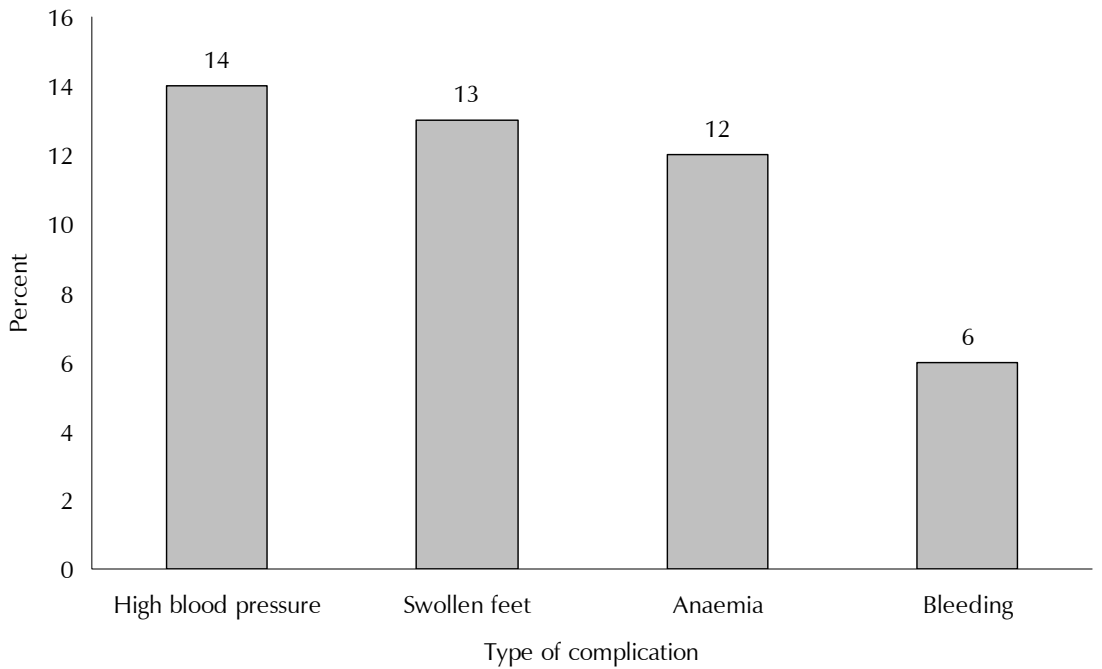
Younger women, women pregnant with their first child, and women who live in urban areas are more likely to have received two or more doses of tetanus toxoid injections. Women with secondary or higher education and women in the highest wealth quintile are also more likely than other women to have two or more tetanus toxoid injections. Across districts, coverage of two or more doses of tetanus toxoid is 59 to 60 percent in Mulanje, Kasungu, and Thyolo and 74 to 75 percent in Mangochi and Salima.

The aim of antenatal care is to minimise adverse maternal and fetal outcomes of pregnancy. Data in Table 9.5 and Figure 9.1 show that common complications among women are high blood pressure (14 percent) and swollen feet (13 percent), both indications of pre-eclampsia. Anaemia is reported by 12 percent of women, and 6 percent of women report experiencing bleeding during pregnancy. It is important to note that the data show self-reported complications as opposed to medically documented problems.

Table 9.5 Complications during pregnancy					
Among women who had a birth in the five years preceding the survey, percentage who had specific complications associated with the pregnancy leading to the most recent birth, by background characteristics, Malawi 2004					
Background characteristic	High blood pressure	Swollen feet	Anaemia	Bleeding	Number of women
Number of ANC visits					
None	na	na	na	na	337
1-3	13.9	12.7	12.1	5.7	3,703
4+	15.5	15.2	13.2	6.1	3,184
Age at birth					
<20	13.9	10.7	12.9	5.4	1,293
20-34	13.8	12.8	12.0	5.2	4,979
35-49	15.3	18.2	11.1	7.8	1,000
Birth order					
1	14.1	12.9	13.6	5.5	1,518
2-3	13.5	10.9	11.1	4.6	2,659
4-5	13.5	13.4	12.6	6.0	1,622
6+	15.5	17.3	11.5	7.0	1,473
Residence					
Urban	11.9	12.4	7.7	4.2	1,041
Rural	14.4	13.3	12.8	5.8	6,231
Region					
Northern	11.9	11.9	11.2	4.4	924
Central	16.6	15.6	14.8	6.2	2,959
Southern	12.3	11.4	9.9	5.4	3,389
District					
Blantyre	15.8	13.1	10.6	10.9	520
Kasungu	18.9	18.1	20.7	7.1	330
Machinga	8.4	8.4	7.4	2.8	284
Mangochi	16.4	15.7	12.7	5.2	411
Mzimba	12.1	12.6	13.6	5.1	464
Salima	17.7	15.5	15.4	5.7	199
Thyolo	14.0	8.9	10.9	5.7	386
Zomba	13.6	13.7	8.3	4.9	389
Lilongwe	12.3	13.1	10.5	3.3	1,013
Mulanje	9.2	9.0	7.7	3.8	296
Other districts	14.6	13.6	12.8	5.9	2,981
Education					
No education	13.3	13.5	12.4	6.6	1,885
Primary 1-4	15.6	12.1	13.3	6.3	2,021
Primary 5-8	13.5	12.7	11.3	5.0	2,485
Secondary+	13.5	16.3	10.8	3.2	880
Wealth quintile					
Lowest	13.4	11.0	13.0	6.0	1,380
Second	14.8	13.1	13.5	6.2	1,579
Middle	15.2	14.1	13.1	6.3	1,610
Fourth	12.9	12.2	11.4	4.5	1,432
Highest	13.5	15.6	8.8	4.8	1,271
Total	14.0	13.2	12.1	5.6	7,271

Note: Total includes 53 cases with number of ANC visits missing.
na = Not applicable

Figure 9.1 Complications During Pregnancy



MDHS 2004

These problems are slightly more prevalent in older women and women with higher order births. Women in rural areas and those living in the Central Region are also more likely to report having problems during pregnancy. In general, a woman's education and wealth status have no association with the likelihood of having pregnancy complications. Across districts, however, there are wide variations. Women in Kasungu are most likely to report problems during pregnancy, while women in Machinga are the least likely to do so.

Table 9.6 shows places where women sought advice and care for complications experienced in pregnancy. The 2004 MDHS did not explore the quality or effect of care received from these facilities. For any complication, the most common source of treatment is a public health facility (44 to 57 percent). About one in five women went to a private health facility for assistance with pregnancy complications. While 85 percent of pregnant women sought treatment for anaemia, one in three women with high blood pressure, swollen feet, and bleeding left the problem untreated.

Table 9.6 Treatment for complications during pregnancy

Among women with a birth in the five years preceding the survey who had complications associated with the most recent pregnancy, percentage who sought advice or treatment, by type of complication, Malawi 2004

Type of complication	Health facility		Home	Traditional birth attendant	Other	Not treated	Number of women with complications
	Public sector	Private sector					
High blood pressure	47.0	17.5	0.9	3.1	2.2	30.7	1,019
Swollen feet	44.5	17.4	1.1	2.6	2.0	33.5	958
Anaemia	56.9	20.1	1.1	3.7	5.4	15.5	877
Bleeding	43.7	18.1	0.5	5.3	4.3	31.9	406

9.2 ASSISTANCE AND MEDICAL CARE AT DELIVERY

An important component in the effort to reduce the health risks of mothers and children is to increase the proportion of babies that are delivered in facilities where skilled attendance is available. Services in a health facility include trained health workers, appropriate supplies, equipment to identify and manage complications in a timely manner, and maintenance of hygienic conditions to prevent infections. The 2004 MDHS respondents were asked to report the place of birth of all children born in the five years before the survey. Table 9.7 shows that 57 percent of births took place in a health facility. This figure shows that there has been no notable improvement from the 1992 and 2000 MDHS surveys (both 55 percent). Government-run health facilities were used for 42 percent of the births, while private facilities managed 15 percent of births. A considerable proportion of births took place at home, either in the respondent's home (29 percent) or the traditional birth attendant (TBA)'s home (12 percent).

Children born to women less than 34 years of age and first-order births are more likely to be delivered in a health facility than other children. Similarly, the majority of births in urban areas, births to women with secondary or higher education, and to women in the highest wealth quintile occurred in a health facility. The proportion of births delivered in a health facility varies from less than 50 percent in Kasungu and Salima (43 percent and 46 percent, respectively) to 79 percent in Blantyre. The assistance of a TBA during delivery is most common in Salima (23 percent) and least common in Mangochi (4 percent).

Table 9.7 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Malawi 2004

Background characteristic	Health facility		Home	Traditional birth attendant	Other	Missing	Total	Number of births
	Public sector	Private sector						
Mother's age at birth								
<20	43.3	13.6	29.7	12.3	1.0	0.1	100.0	2,205
20-34	42.3	16.0	28.3	12.2	1.2	0.1	100.0	7,321
35-49	37.2	14.7	35.1	11.7	1.1	0.2	100.0	1,246
Birth order								
1	47.6	15.8	24.2	11.4	0.8	0.2	100.0	2,530
2-3	42.3	15.6	28.7	11.9	1.3	0.2	100.0	3,945
4-5	39.8	15.1	32.2	11.7	1.1	0.0	100.0	2,308
6+	36.4	14.4	33.9	13.9	1.3	0.1	100.0	1,989
Residence								
Urban	66.4	17.9	12.3	2.7	0.6	0.1	100.0	1,425
Rural	38.2	14.9	32.0	13.6	1.2	0.1	100.0	9,347
Region								
Northern	46.9	20.0	23.2	8.7	1.1	0.1	100.0	1,345
Central	37.2	15.3	31.9	14.3	1.2	0.2	100.0	4,494
Southern	44.8	14.1	28.7	11.1	1.1	0.1	100.0	4,933
District								
Blantyre	70.0	8.6	14.1	5.7	1.7	0.0	100.0	724
Kasungu	36.0	7.4	36.9	18.9	0.9	0.0	100.0	525
Machinga	42.0	13.4	33.7	10.0	0.7	0.1	100.0	441
Mangochi	38.4	12.5	44.9	3.6	0.6	0.0	100.0	636
Mzimba	40.6	25.4	25.2	7.5	1.2	0.1	100.0	676
Salima	38.7	7.7	29.5	23.3	0.7	0.1	100.0	312
Thyolo	37.9	13.5	27.1	19.3	2.2	0.0	100.0	575
Zomba	47.7	18.0	22.9	11.0	0.5	0.0	100.0	544
Lilongwe	37.9	17.0	32.4	12.4	0.1	0.1	100.0	1,489
Mulanje	38.7	20.8	22.7	16.6	1.0	0.1	100.0	437
Other districts	40.4	15.8	29.7	12.4	1.5	0.2	100.0	4,414
Education								
No education	32.2	10.7	41.9	13.9	1.2	0.1	100.0	2,903
Primary 1-4	39.3	12.7	32.3	14.3	1.0	0.3	100.0	3,102
Primary 5-8	47.1	17.9	22.6	10.9	1.4	0.1	100.0	3,637
Secondary+	57.2	26.1	10.6	5.8	0.3	0.0	100.0	1,127
Antenatal care visits¹								
None	19.2	6.3	58.2	14.9	1.3	0.0	100.0	337
1-3	38.0	13.8	34.1	12.6	1.4	0.0	100.0	2,738
4+	47.4	17.5	23.2	10.9	1.0	0.1	100.0	4,149
Wealth quintile								
Lowest	36.2	10.6	40.4	11.9	0.8	0.0	100.0	2,099
Second	34.6	12.0	36.1	15.6	1.4	0.4	100.0	2,426
Middle	38.9	13.3	31.9	14.1	1.7	0.1	100.0	2,446
Fourth	45.3	18.2	23.3	12.4	0.6	0.2	100.0	2,091
Highest	59.6	25.1	10.1	4.4	0.8	0.0	100.0	1,709
Total	41.9	15.3	29.4	12.1	1.1	0.1	100.0	10,771

Note: Private health facility includes Mission health facility. Total includes 53 cases with the number of antenatal care visits missing.

¹ Includes only the most recent birth in the five years preceding the survey.

The 2004 MDHS asked questions about the person who assisted with the delivery. The majority of births were attended by medical professionals, 50 percent by a nurse or midwife, 6 percent by a doctor, and 1 percent by a patient attendant. In the four years since the 2000 MDHS there has been a slight increase in the proportion of births that are attended by a doctor—from 5 to 6 percent. The role of traditional birth attendants (TBAs) in delivery assistance has also increased—from 23 to 26 percent (Table 9.8).

Table 9.8 Assistance during delivery

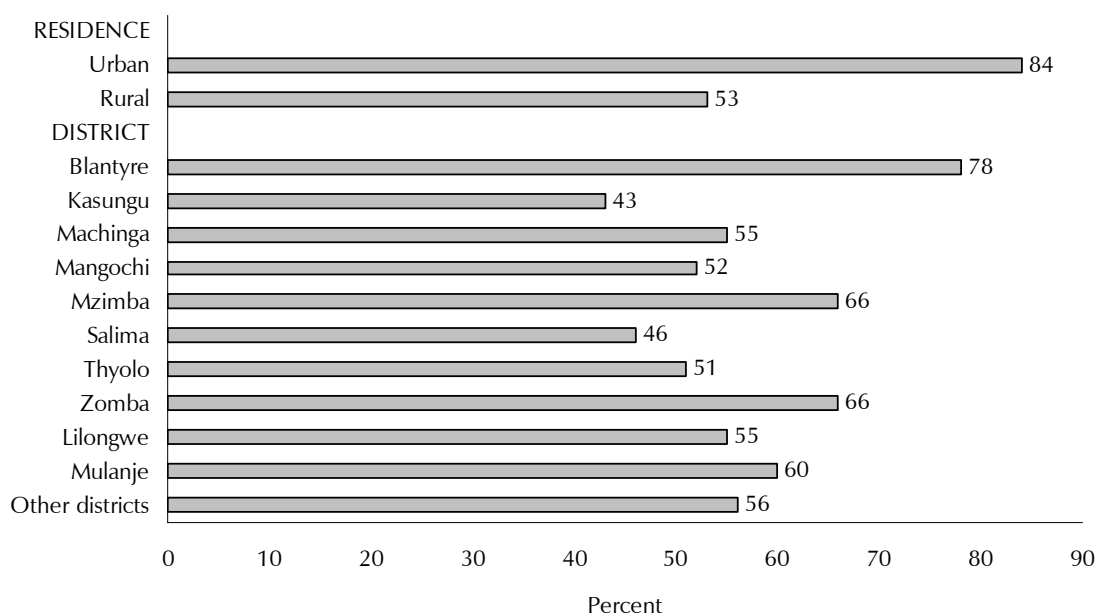
Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, according to background characteristics, Malawi 2004

Background characteristic	Doctor/clinical officer	Nurse or midwife	Patient attendant	Traditional birth attendant	Relative/friend/other	No one	Don't know/missing	Total	Number of births
Mother's age at birth									
<20	5.3	50.9	0.5	28.4	13.6	0.8	0.5	100.0	2,205
20-34	6.3	50.6	1.1	25.2	14.4	1.9	0.4	100.0	7,321
35-49	5.8	45.4	0.6	27.7	14.1	5.2	1.1	100.0	1,246
Birth order									
1	6.7	56.1	0.5	24.5	11.3	0.6	0.3	100.0	2,530
2-3	6.1	50.5	1.1	25.9	14.6	1.4	0.5	100.0	3,945
4-5	5.8	47.9	1.0	25.6	16.8	2.4	0.4	100.0	2,308
6+	5.3	44.1	1.3	29.5	14.1	4.9	0.9	100.0	1,989
Residence									
Urban	8.3	74.8	0.7	8.4	6.7	0.9	0.2	100.0	1,425
Rural	5.7	46.3	1.0	28.9	15.4	2.2	0.6	100.0	9,347
Region									
Northern	6.1	60.2	0.3	18.8	11.4	3.0	0.1	100.0	1,345
Central	5.8	45.5	0.8	31.5	14.1	1.7	0.8	100.0	4,494
Southern	6.2	51.5	1.3	23.4	15.1	2.2	0.4	100.0	4,933
District									
Blantyre	8.5	69.2	0.3	14.3	5.4	1.9	0.3	100.0	724
Kasungu	8.8	33.1	1.1	38.9	13.8	3.6	0.7	100.0	525
Machinga	2.3	46.5	6.2	16.2	25.2	2.2	1.4	100.0	441
Mangochi	11.9	38.3	2.0	24.8	21.0	1.9	0.1	100.0	636
Mzimba	7.0	58.6	0.3	15.8	14.5	3.6	0.1	100.0	676
Salima	8.8	37.1	0.1	41.6	10.7	0.4	1.4	100.0	312
Thyolo	6.0	44.9	0.3	35.8	10.5	2.3	0.3	100.0	575
Zomba	7.2	57.2	1.1	19.7	11.8	2.5	0.4	100.0	544
Lilongwe	3.7	50.2	0.8	30.0	14.5	0.7	0.1	100.0	1,489
Mulanje	5.2	53.7	1.0	24.9	14.1	0.8	0.4	100.0	437
Other districts	5.2	50.1	0.6	26.7	14.5	2.3	0.7	100.0	4,414
Education									
No education	3.9	37.9	1.0	31.8	21.2	3.5	0.7	100.0	2,903
Primary 1-4	6.2	44.2	1.3	29.5	16.0	2.1	0.7	100.0	3,102
Primary 5-8	6.2	57.8	0.8	23.4	10.1	1.3	0.3	100.0	3,637
Secondary+	10.1	72.8	0.5	11.7	4.5	0.4	0.1	100.0	1,127
Wealth quintile									
Lowest	5.5	40.4	0.7	30.5	19.9	2.3	0.7	100.0	2,099
Second	4.1	41.2	1.3	32.9	17.7	2.1	0.7	100.0	2,426
Middle	5.5	45.2	1.2	29.2	15.6	2.9	0.5	100.0	2,446
Fourth	6.4	56.2	0.6	24.0	10.8	1.7	0.4	100.0	2,091
Highest	9.5	74.2	0.9	9.8	4.5	1.0	0.1	100.0	1,709
Total	6.0	50.1	1.0	26.2	14.2	2.1	0.5	100.0	10,771

Note: If the respondent mentioned more than one attendant, only the most qualified attendant is considered in this tabulation.

While 78 percent of births in Blantyre were assisted by a health professional, the corresponding proportions in Kasungu and Salima are 43 and 46 percent, respectively (Figure 9.2). Delivery by a TBA is most common in Salima (42 percent) and Kasungu (39 percent), while Blantyre has the lowest level of TBA deliveries (14 percent). In rural areas 15 percent of births are attended by relatives or other persons who may not be trained in assisting deliveries, and 29 percent of the births are assisted by TBAs. With poor quality and inadequate antenatal care, as well as limited access to skilled attendance at delivery, the concept of safe pregnancy and child birth may not be realised by some Malawian women, especially those residing in rural areas.

Figure 9.2 Assistance at Delivery from a Health Professional, by Residence and District



MDHS 2004

One outcome of pregnancy assessed during the survey was assisted operative delivery such as caesarean section (C-section). This operation is one of the emergency obstetric care functions recommended for addressing some complications that contribute to high maternal mortality. According to the survey data, 3 percent of births in the five years preceding the survey were delivered by C-section. This rate is similar to that recorded in the 2000 MDHS. The stagnation in the C-section rate since 1992 in Malawi suggests that emergency obstetric care is limited to a small proportion of women.

Table 9.9 shows that C-section deliveries are more common among births to younger women, for the first child, births to women with higher education, and women residing in urban areas. In four districts, Blantyre, Mzimba, Thyolo, and Zomba, the proportion of births delivered by C-section is slightly higher (4 to 5 percent) than the national average of 3 percent. The higher proportion of C-section operations in Blantyre and Zomba was also reported in the 2000 MDHS.

half of the births. Forty-three percent of all births (or 89 percent of those with a birth weight reported) were reported to be of 2.5 kilograms or more. Five percent of births (11 percent of those with a birth weight) were less than 2.5 kilograms, the cutoff point below which a baby is considered to have low birth weight. The proportion of low birth weight babies is 7 percent or higher in Blantyre, Kasungu, Machinga, and Mzimba.

Regarding the size of the child at birth, 82 percent of births were reported by the mother as being average or larger than average in size. For 16 percent of births, mothers said that their child was smaller than average (12 percent) or very small (4 percent); in the 2000 MDHS, 17 percent of births were reported as smaller than average or very small. District estimates of low birth weight, using subjective assessment, vary from a low of 11 percent in Mulanje to 22 percent in Kasungu.

9.3 POSTNATAL CARE

Postnatal care is an important component of obstetric and neonatal care aimed at preventing and managing any complications that may endanger the survival of the mother and the baby. Postnatal care is therefore recommended immediately after the birth of the baby and placenta to 42 days after delivery. Respondents who gave birth in a health facility are assumed to have received a postnatal check during their stay in the health facility. Those who gave birth outside a health facility were asked whether someone checked on their health following the delivery. Table 9.10 shows that 31 percent of women received postnatal care, and 21 percent of these women reported receiving care within two days of delivery. Few women had a checkup 3 to 6 days after delivery, and 8 percent received care between the first and sixth week after delivery. Table 9.10 further shows that postnatal care is more common for older women, women residing in urban areas, more educated women, and women in the highest wealth quintile. Women who live in Blantyre and Thyolo are the most likely to have had a postnatal checkup, whereas three in four women in Salima and Lilongwe did not receive postnatal care.

The low utilisation of health facilities for delivery as well as nonutilisation of postnatal care services shows that most women do not get skilled care during delivery and the postpartum period. Strategies for improving maternal health should therefore focus on pull factors for health facility care or bringing the skilled care to the home.

Table 9.10 Postnatal care

Among women who gave birth in the five years preceding the survey, the percent distribution by timing of postnatal checkup, according to background characteristics, Malawi 2004

Background characteristic	Timing of first postnatal checkup				Did not receive postnatal checkup ¹	Total	Number of women
	Within 2 days of delivery	3-6 days after delivery	7-41 days after delivery	Don't know/missing			
Age at birth							
<20	19.9	2.0	6.5	0.2	71.3	100.0	1,293
20-34	19.9	3.1	8.3	0.1	68.5	100.0	4,979
35-49	24.4	2.6	6.6	0.3	66.0	100.0	1,000
Birth order							
1	21.8	2.8	8.7	0.2	66.5	100.0	1,518
2-3	19.8	3.1	8.3	0.2	68.6	100.0	2,659
4-5	18.1	2.9	8.4	0.2	70.4	100.0	1,622
6+	23.3	2.3	5.3	0.2	68.9	100.0	1,473
Residence							
Urban	27.2	2.6	12.1	0.1	57.9	100.0	1,041
Rural	19.4	2.9	7.0	0.2	70.4	100.0	6,231
Region							
Northern	25.0	3.6	5.8	0.3	65.3	100.0	924
Central	17.6	2.3	6.7	0.0	73.4	100.0	2,959
Southern	21.9	3.1	9.3	0.3	65.4	100.0	3,389
District							
Blantyre	22.8	3.8	18.4	0.2	54.7	100.0	520
Kasungu	25.9	1.1	5.0	0.0	68.0	100.0	330
Machinga	22.2	2.5	3.2	0.5	71.6	100.0	284
Mangochi	28.0	4.3	7.4	0.5	59.8	100.0	411
Mzimba	22.9	3.3	7.0	0.3	66.5	100.0	464
Salima	11.6	3.8	9.8	0.2	74.5	100.0	199
Thyolo	29.8	2.6	11.6	0.2	55.8	100.0	386
Zomba	20.6	2.9	7.3	0.0	69.2	100.0	389
Lilongwe	17.3	2.3	5.7	0.0	74.7	100.0	1,013
Mulanje	16.9	4.8	13.3	0.7	64.2	100.0	296
Other districts	18.9	2.5	6.4	0.1	72.0	100.0	2,981
Education							
No education	16.8	2.4	4.6	0.1	76.1	100.0	1,885
Primary 1-4	19.2	3.0	6.7	0.2	70.9	100.0	2,021
Primary 5-8	22.6	2.7	8.2	0.3	66.2	100.0	2,485
Secondary+	25.7	3.8	15.9	0.2	54.4	100.0	880
Wealth quintile							
Lowest	16.9	1.9	5.3	0.2	75.7	100.0	1,380
Second	18.8	2.4	6.2	0.3	72.3	100.0	1,579
Middle	18.4	3.5	6.7	0.1	71.3	100.0	1,610
Fourth	23.0	2.5	7.9	0.3	66.3	100.0	1,432
Highest	26.8	3.9	13.6	0.0	55.7	100.0	1,271
Total	20.6	2.8	7.8	0.2	68.6	100.0	7,271

Note: If a woman had more than one live birth outside a health facility, only the most recent birth is considered.

¹Includes women who received the first postnatal checkup after 41 days

Women who gave birth in the five years preceding the survey were asked to report any problems, such as heavy bleeding, high blood pressure, stroke or convulsions, infection or fever, postpartum depression, and leakage of urine or stools from the vagina (probable fistula) post partum for their most recent birth. Table 9.11 shows that heavy bleeding is the most often reported problem (7 percent), followed by infection and high blood pressure (3 percent each). Probable fistula, postpartum depression, and stroke/convulsions were each reported by two percent of women.

Background characteristic	Heavy bleeding	High blood pressure	Stroke/convulsions	Infection/fever	Leakage of urine or stool from vagina	Postpartum depression/blues	Number of women
Number of ANC visits							
None	3.0	2.2	1.6	3.0	3.0	2.1	337
1-3	6.7	2.7	1.5	2.7	1.6	1.7	3,703
4+	7.2	3.3	1.4	4.1	1.5	1.6	3,184
Age at birth							
<20	6.8	2.8	1.5	2.3	2.7	1.7	1,293
20-34	6.5	2.6	1.3	3.2	1.3	1.8	4,979
35-49	7.6	4.7	1.9	4.9	1.5	1.0	1,000
Birth order							
1	6.6	1.8	1.5	2.8	2.3	1.6	1,518
2-3	6.5	3.1	1.3	2.8	1.5	1.4	2,659
4-5	6.5	2.4	1.1	3.8	1.6	2.4	1,622
6+	7.4	4.4	2.0	4.1	1.0	1.5	1,473
Residence							
Urban	6.1	2.2	0.7	2.3	1.6	1.5	1,041
Rural	6.8	3.0	1.6	3.5	1.6	1.7	6,231
Region							
Northern	6.8	2.4	1.8	2.9	1.3	1.4	924
Central	6.4	2.6	1.8	3.6	1.4	1.3	2,959
Southern	6.9	3.4	1.1	3.1	1.9	2.1	3,389
District							
Blantyre	8.7	4.5	0.9	4.1	4.0	3.3	520
Kasungu	8.4	4.0	3.8	3.8	2.1	1.3	330
Machinga	5.9	3.7	0.9	2.0	1.4	0.8	284
Mangochi	8.7	6.2	3.0	6.3	2.7	3.5	411
Mzimba	7.0	3.4	2.9	3.0	1.3	2.3	464
Salima	4.9	1.4	2.3	2.4	1.1	1.6	199
Thyolo	7.6	4.4	1.6	3.9	2.3	1.3	386
Zomba	6.5	2.9	1.5	3.3	1.8	1.2	389
Lilongwe	5.3	1.3	0.9	3.2	1.7	1.7	1,013
Mulanje	5.9	3.3	0.5	1.5	1.1	1.5	296
Other districts	6.5	2.4	1.1	3.1	1.0	1.3	2,981
Education							
No education	5.5	2.5	1.5	3.0	1.4	1.4	1,885
Primary 1-4	6.9	4.0	1.5	2.9	1.6	2.0	2,021
Primary 5-8	8.1	2.9	1.5	3.9	1.9	1.8	2,485
Secondary+	5.1	1.5	0.9	3.3	1.0	1.4	880
Wealth quintile							
Lowest	5.4	3.1	1.7	2.4	1.4	1.4	1,380
Second	6.4	3.1	1.7	3.4	1.8	1.4	1,579
Middle	6.4	2.8	1.3	3.3	2.0	1.4	1,610
Fourth	8.6	3.4	1.3	3.0	1.3	2.1	1,432
Highest	6.8	2.1	1.2	4.4	1.3	2.2	1,271
Total	6.7	2.9	1.5	3.3	1.6	1.7	7,271

Note: Total includes 53 cases with the number of antenatal care visits missing.

9.4 WOMEN'S PARTICIPATION IN DECISIONMAKING

Health-seeking behaviour is influenced by a number of factors, including the ability to make decisions regarding one's health or to have control over family income. Lack of these abilities has been cited as a barrier for proper utilisation of maternal and child health services. Women who had a live birth in the five years preceding the survey were asked whether they participated in making decisions about their own health care, making large household purchases, purchasing daily household needs, visiting family members or relatives, and determining what food to cook each day. Women were also asked about their attitude towards a wife's ability to negotiate sex with her husband, as well as their perceptions about wife beating (see Chapter 3).

Data in Table 9.12 indicate that women who were more empowered were generally somewhat more likely to receive health care during pregnancy, delivery, and the postpartum period. For example, the proportion of women who received antenatal care increases from 91 percent among women who have no final say in decisionmaking to 93 percent or higher for women who participated in one or more decisions. Similarly, the percentage of women who received delivery care from a health professional declines from 60 percent among women who do not think there was any reason for a husband to beat his wife to 52 percent or lower for women who think that a husband is justified in beating his wife.

Women's status indicator	Percentage of women who:			Percentage of births assisted by a doctor, clinical officer, nurse/ midwife/ patient attendant	
	Received antenatal care from a doctor, clinical officer, nurse, midwife, or patient attendant	Received postnatal care within the first two days of delivery ¹	Number of women	Number of births	Number of births
Number of decisions in which woman has final say²					
0	91.4	59.6	1,264	55.2	1,911
1-2	93.1	58.8	3,227	54.9	4,880
3-4	94.8	63.8	1,476	61.7	2,184
5	93.0	64.0	1,305	59.2	1,797
Number of reasons to refuse sex with husband					
0	91.1	59.9	753	54.1	1,130
1-2	92.1	58.2	1,362	55.2	2,028
3-4	93.8	61.7	5,157	58.0	7,614
Number of reasons wife beating is justified					
0	93.4	63.1	5,159	59.9	7,628
1-2	92.5	56.1	1,245	52.2	1,840
3-4	93.7	52.6	582	45.9	866
5	89.9	57.6	286	50.5	437
Total	93.2	60.9	7,271	57.0	10,771

9.5 CHILDHOOD VACCINATIONS

Malawi's Expanded Programme on Immunisation (EPI) follows guidelines for vaccinating children set by the World Health Organisation (WHO). A child is considered fully vaccinated if she or he has received one dose of BCG vaccine, three doses each of DPT and polio vaccine, and one dose of measles vaccine. BCG protects against tuberculosis and should be given at birth or first clinic contact. DPT protects against diphtheria, pertussis (whooping cough), and tetanus. DPT and polio vaccines are given at approximately 6, 10, and 14 weeks of age. The measles vaccine should be given at or soon after the child reaches nine months of age. The Malawi EPI recommends that children receive the complete schedule of vaccinations before 12 months of age. A dose of polio vaccine at or around birth is being promoted, although it is not yet widely practised in Malawi. To assist in the evaluation of the EPI, the 2004 MDHS survey collected information on vaccination coverage for all living children born in the five years preceding the survey.

Information on vaccination coverage was collected in two ways: from child health cards seen by the interviewer and from mothers' verbal reports. Health cards on which vaccinations are recorded are typically provided by health centres and clinics. If a mother was able to present such a card to the interviewer, this was used as the source of information, with the interviewer recording vaccination dates directly from the card. In addition to collecting vaccination information from cards, there were two ways of collecting the information from the mother herself. If a vaccination card was presented but a vaccine was not recorded on the card as being given, the mother was asked to recall whether or not that particular vaccine had been given. If the mother was not able to provide a card for the child at all, she was asked through a series of probing questions whether or not the child had received BCG, polio, DPT (including the number of doses for each), and measles vaccinations.

Table 9.13 presents information on vaccination coverage for children age 12-23 months¹ according to the source of information used to determine coverage, i.e., the child health card or mother's report. Based on information from the health card and mother's report, 91 percent of children age 12-23 months had been vaccinated against tuberculosis, 82 percent received DPT3, 78 percent received polio3, and 79 percent received measles vaccine. Overall, 64 percent of children age 12-23 months have received all the recommended vaccines, and 4 percent of children have received none.

Vaccinations are most effective when given at the proper age. While 79 percent of children age 12-23 months have been vaccinated against measles, only 63 percent were vaccinated before their first birthday, indicating that some children were late in receiving their measles vaccination. This is important because measles at a young age is potentially life threatening, especially in malnourished children.

Figure 9.3 shows the percentage of children age 12-23 months who received the recommended six vaccines by 12 months of age. Coverage of DPT1 and polio1 is 94 percent, 90 percent for BCG, and 63 percent for measles. Another way to evaluate the success of an immunisation programme is to calculate the dropout rate for DPT and polio. The dropout rate is defined as the percentage of children who receive the first dose but do not receive the third dose of a

¹ These children are supposed to have received a complete schedule of vaccinations.

specific vaccine. Using data in Table 9.13, the dropout rate for DPT is 14 percent, and that for polio is 18 percent.

Table 9.13 Vaccinations by source of information

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Malawi 2004

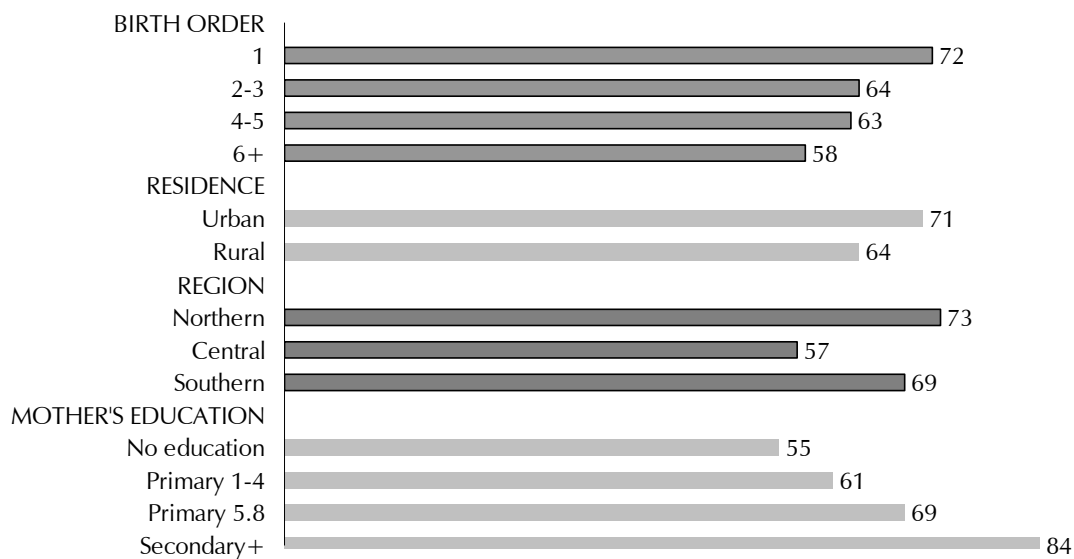
Source of information	BCG	DPT			Polio			Measles	All ²	No vaccinations	Number of children	
		1	2	3	0 ¹	1	2					3
Vaccinated at any time before survey												
Vaccination card	70.3	73.3	71.8	67.2	29.1	73.7	71.8	67.4	61.8	57.4	0.2	1,631
Mother's report	21.1	21.6	18.8	14.3	8.0	21.3	18.0	10.2	16.9	7.0	3.3	563
Either source	91.4	95.0	90.6	81.5	37.1	94.9	89.7	77.7	78.7	64.4	3.5	2,194
Vaccinated by 12 months of age³												
	89.7	94.0	88.4	76.1	36.8	93.9	87.7	73.2	62.7	51.1	4.3	2,194

¹ Polio 0 is the polio vaccination given at birth.

² BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

³ For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

Figure 9.3 Percentage of Children Age 12-23 Months Who Were Vaccinated by 12 Months of Age



MDHS 2004

Table 9.14 shows the trends in childhood vaccination coverage reported in MDHS surveys from 1992 to 2004. Data in the table indicate that vaccination coverage in Malawi has declined. The first indication comes from a small drop in the percentage of children with a vaccination card from 86 percent in 1992 to 81 in 2000 and to 74 percent in 2004. The decline may indicate decreased access to services. The failure of some children to complete the polio and the DPT series has resulted in a decline in polio3 coverage from 88 percent in 1992 to 80 percent in 2000 and to 78 percent in 2004. Similarly, DPT3 coverage dropped from 89 percent in 1992 to 84 percent in 2000 and to 82 percent in 2004. The percentage of children considered fully immunized declined from 82 percent in 1992 to 64 percent in 2004.

Source	DPT			Polio				Measles	All	No vaccinations	Percentage with card	Number of children	
	BCG	1	2	3	0	1	2						3
1992 MDHS	97.0	96.9	94.3	88.6	na	96.9	94.2	88.1	85.8	81.8	2.5	86.3	772
2000 MDHS	92.4	95.9	92.6	84.2	46.9	95.7	91.3	79.8	83.2	70.1	2.8	81.1	2,238
2004 MDHS	91.4	95.0	90.6	81.5	37.1	94.9	89.7	77.7	78.7	64.4	3.5	74.3	2,194

na = Not applicable

Table 9.15 presents the vaccination coverage in 2004 among children age 12-23 months by selected background characteristics. First-born children, children in urban areas, children in the Northern Region, children born to women with secondary and higher education, and those born to women in the higher wealth quintiles are more likely than other children to be fully vaccinated. Among the oversampled districts, vaccination coverage ranges from 53 percent or lower in Kasungu, Salima, and Lilongwe to 84 percent in Blantyre. While nationally 4 percent of children age 12-23 months have never received any vaccination, the percentage varies substantially across districts. Lilongwe shows the highest percentage of children who have had no vaccinations (10 percent).

9.6 ACUTE RESPIRATORY INFECTION

Pneumonia is a leading cause of death of young children in Malawi. The programme to control acute respiratory infection (ARI) aims at treating cases of ARI early, before complications develop. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths due to pneumonia. Emphasis is therefore placed on recognition of signs of impending severity, both by mothers and primary health care workers, so help can be sought. The prevalence of ARI was estimated by asking mothers whether their children under age five had been ill with cough accompanied by short, rapid breathing in the two weeks preceding the survey. These symptoms are compatible with pneumonia. It should be borne in mind that morbidity data collected in surveys are subjective (i.e., mother's perception of illness) and not validated by medical examination.

Table 9.16 shows that 19 percent of children under five years of age were ill with a cough and short, rapid breathing at some time in the two weeks preceding the survey. Using the same definition, the 2000 MDHS and 1992 MDHS survey reported that 27 percent and 15 percent of children had ARI in the previous two weeks, respectively. Prevalence of respiratory illness varies by age of the child, with the highest prevalence occurring at 6-11 months. Since 1992, symptoms of respiratory illnesses have increased among children age 6-11 months. Children in rural areas are more likely to have symptoms of ARI than their urban counterparts, and children born to women with less education are more likely to have ARI symptoms than those born to women with no education or secondary and higher education. ARI is higher among children born to women in the middle wealth quintile.

ARI is slightly higher in the Central and Southern regions (20 and 19 percent, respectively) than in the Northern Region (15 percent). District prevalence is as low as 14 percent in Blantyre and as high as 25 percent in Kasungu and Zomba. It cannot be ascertained from these data whether this wide range in ARI prevalence reflects genuine differences in morbidity or rather socio-cultural differences in the perception of disease or disease severity.

Just over one-third of children were reported to have had a fever in the two weeks preceding the survey. The percentage of children with fever is highest among children age 6-11 months (53 percent) and lowest among children age 48-49 months (21 percent). Children born to rural women, women in the Central Region, women with less education, and women living in households in the lowest wealth quintiles are more likely to have had fever than other children.

Among children with symptoms of ARI and/or fever, just 20 percent were taken to a health facility. Younger children age less than 6 months are more likely to be taken to a health facility, as are urban children, children born to women in the Southern Region, children of women with upper primary or higher education, and children of women in the highest wealth quintiles. By district, children are most likely to be taken to a health facility in Salima and Zomba districts (28 percent each) and least likely to be taken in Machinga District (13 percent).

These findings, although underscoring serious problems of access to health services, may also suggest that mothers and other household members do not always understand the importance of quick response to ARI symptoms and fever.

Table 9.16 Prevalence and treatment of symptoms of ARI and fever

Percentage of children under five years of age who had a cough accompanied by short, rapid breathing (symptoms of ARI) and percentage of children who had fever in the two weeks preceding the survey, and percentage of children with symptoms of ARI and/or fever for whom treatment was sought from a health facility or provider, by background characteristics, Malawi 2004

Background characteristic	Percentage of children with symptoms of ARI	Percentage of children with fever	Number of children	Among children with symptoms of ARI and/or fever, percentage for whom treatment was sought from a health facility/provider ¹	Number of children
Age in months					
<6	20.8	30.7	1,109	22.6	431
6-11	26.6	53.2	1,188	21.0	732
12-23	22.2	49.5	2,194	20.7	1,227
24-35	17.6	39.5	1,743	15.6	817
36-47	15.7	28.8	1,741	20.5	630
48-59	12.5	21.1	1,802	17.9	522
Sex					
Male	20.2	37.1	4,839	20.4	2,197
Female	17.5	37.2	4,938	18.8	2,163
Residence					
Urban	11.3	29.9	1,341	22.6	466
Rural	20.0	38.3	8,436	19.3	3,894
Region					
Northern	15.2	28.4	1,239	17.9	459
Central	19.6	39.9	4,071	18.2	1,925
Southern	19.1	37.1	4,468	21.4	1,976
District					
Blantyre	14.4	29.4	670	20.8	237
Kasungu	24.5	40.0	471	13.9	241
Machinga	16.0	35.6	405	13.0	162
Mangochi	21.5	36.8	566	20.8	259
Mzimba	17.4	28.9	630	14.7	237
Salima	18.1	42.1	281	28.2	139
Thyolo	21.9	47.3	514	23.6	281
Zomba	24.5	40.1	498	27.8	249
Lilongwe	16.0	38.3	1,376	15.5	601
Mulanje	22.2	44.3	375	21.9	184
Other districts	18.6	36.5	3,992	20.0	1,770
Mother's education					
No education	17.6	37.3	2,594	17.0	1,136
Primary 1-4	20.6	40.4	2,805	16.9	1,358
Primary 5-8	19.7	35.9	3,314	22.4	1,457
Secondary+	14.5	32.1	1,062	26.0	407
Wealth quintile					
Lowest	19.7	40.0	1,889	15.6	903
Second	19.9	41.2	2,170	18.3	1,042
Middle	23.4	37.6	2,206	20.2	1,044
Fourth	17.6	35.3	1,916	22.5	818
Highest	11.5	29.7	1,597	23.2	553
Total	18.8	37.1	9,777	19.6	4,360

ARI = Acute respiratory infection

¹ Excludes pharmacy, shop, and traditional practitioner.

9.7 DIARRHOEAL DISEASE

Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among young children in Malawi. Exposure to agents that cause diarrhoea is frequently related to use of contaminated water and unhygienic practices in food preparation and excreta disposal.

Table 9.17 shows the prevalence of diarrhoea in children under five years of age according to background characteristics. The results indicate that 22 percent of children had diarrhoea at some time in the two weeks preceding the survey, an increase from 18 percent reported in the 2000 MDHS survey. As reported in previous MDHS surveys, diarrhoea prevalence peaks at age 6-11 months (41 percent). The prevalence of diarrhoea varies little by the child's sex. Children in urban areas experience a lower rate of diarrhoea than rural children. Children in the Central Region are more likely to have diarrhoea (27 percent) than children in the Southern Region (21 percent) and Northern Region (12 percent).

Diarrhoea is less prevalent among children who live in houses with piped water and children in the highest wealth quintile. Among the oversampled districts, diarrhoea is most prevalent in Salima, Kasungu, and Thyolo (27 percent or higher), and least prevalent in Blantyre and Mzimba (17 percent or lower).

Table 9.17 Prevalence of diarrhoea

Percentage of children under five years with diarrhoea in the two weeks preceding the survey, by background characteristics, Malawi 2004

Background characteristic	Diarrhoea in the two weeks preceding the survey	Number of children
Age in months		
<6	9.2	1,109
6-11	41.2	1,188
12-23	38.9	2,194
24-35	21.5	1,743
36-47	11.8	1,741
48-59	8.3	1,802
Sex		
Male	23.4	4,839
Female	21.1	4,938
Residence		
Urban	17.5	1,341
Rural	23.0	8,436
Region		
Northern	12.3	1,239
Central	26.6	4,071
Southern	21.1	4,468
District		
Blantyre	17.0	670
Kasungu	27.8	471
Machinga	19.3	405
Mangochi	25.0	566
Mzimba	15.7	630
Salima	28.8	281
Thyolo	27.4	514
Zomba	24.0	498
Lilongwe	24.4	1,376
Mulanje	22.1	375
Other districts	21.4	3,992
Mother's education		
No education	21.4	2,594
Primary 1-4	25.8	2,805
Primary 5-8	20.6	3,314
Secondary+	20.3	1,062
Source of drinking water		
Piped	18.3	1,699
Protected well	22.6	4,248
Open well	24.9	2,648
Surface	21.2	1,169
Wealth quintile		
Lowest	26.4	1,889
Second	23.9	2,170
Middle	22.4	2,206
Fourth	19.6	1,916
Highest	18.1	1,597
Total	22.3	9,777

Table 9.18 Knowledge of ORS packets

Percentage of mothers with births in the five years preceding the survey who know about ORS packets for treatment of diarrhoea, by background characteristics, Malawi 2004

Background characteristic	Percentage of mothers who know about ORS packets	Number of mothers
Age		
15-19	92.2	605
20-24	94.6	2,345
25-29	95.0	1,835
30-34	92.1	1,132
35-49	93.0	1,354
Residence		
Urban	96.5	1,041
Rural	93.4	6,231
Region		
Northern	92.8	924
Central	92.9	2,959
Southern	94.9	3,389
District		
Blantyre	96.4	520
Kasungu	93.4	330
Machinga	91.8	284
Mangochi	87.8	411
Mzimba	94.1	464
Salima	93.4	199
Thyolo	97.9	386
Zomba	98.4	389
Lilongwe	92.0	1,013
Mulanje	96.7	296
Other districts	93.7	2,981
Education		
No education	88.6	1,885
Primary 1-4	93.7	2,021
Primary 5-8	96.1	2,485
Secondary+	98.7	880
Wealth quintile		
Lowest	92.8	1,380
Second	93.0	1,579
Middle	92.2	1,610
Fourth	94.7	1,432
Highest	97.0	1,271
Total	93.8	7,271

A simple and effective response to a child's dehydration is a prompt increase in the intake of appropriate fluids, i.e., oral rehydration therapy (ORT), which has been promoted in Malawi since the early 1980s. ORT is promoted in three types of interventions. The first is the mixture of commercially prepared packets of oral rehydration salts (ORS) commonly known as Thanzi, and water. The other two types are facility-based provision of premixed ORS, and various home-made grain-based rehydration fluids such as rice water and maize water.

In the 2004 MDHS survey, women who had a birth in the last five years were asked questions about their knowledge of ORS packets. Table 9.18 shows that almost all women (94 percent) know of these packets. Knowledge of ORS has increased from 90 percent in 1992 and 86 percent in 2000. Knowledge of this life-saving technology is slightly higher among women in urban areas, more educated women, women in the Southern Region, and women in the highest wealth quintile. Age differences in the knowledge of ORS packets are minimal.

Mothers of children who were reported to have had diarrhoea in the two weeks prior to the survey were asked about their response to the illness. Treatment of children with diarrhoea has improved since 2000. While 28 percent of mothers reported that they took their child to a health facility in 2000, the proportion had increased to 36 percent in 2004. In 2000, 24 percent of children with diarrhoea received no treatment (Table 9.19). This number dropped to 18 percent in 2004. ORS was given to 61 percent of children with diarrhoea, an increase from 43 percent in the 1992 MDHS and 48 percent in the 2000 MDHS. Overall, 70 percent of children were given either ORS or increased fluids, an increase from 63 percent in the 1992 MDHS and 62 percent in 2000 MDHS.

Table 9.19 Diarrhoea treatment

Among children under five years who had diarrhoea in the two weeks preceding the survey, percentage taken for treatment to a health provider, percentage who received oral rehydration therapy (ORT), and percentage given other treatments, according to background characteristics, Malawi 2004

Background characteristic	Percentage taken to a health facility ¹	Oral rehydration therapy (ORT)			Other treatments					Number of children	
		ORS packets	Increased fluids	ORS or increased fluids	Pill/syrup	Injection	Intra-venous solution	Home remedy/other	Missing		No treatment
Age in months											
<6	22.5	35.8	30.6	51.8	9.8	0.0	0.0	13.9	0.3	38.0	102
6-11	41.3	62.1	34.0	70.6	26.3	0.3	0.1	12.5	0.0	18.5	490
12-23	39.5	67.3	38.4	74.7	27.6	0.4	0.0	12.8	0.1	14.0	853
24-35	29.2	58.2	34.4	69.6	29.8	0.3	0.2	10.9	0.1	19.0	375
36-47	35.3	55.1	30.2	62.1	28.4	0.8	0.0	12.4	0.2	18.1	206
48-59	32.0	55.3	42.1	66.9	23.0	0.9	2.1	15.7	0.0	19.2	150
Sex											
Male	37.9	63.2	37.1	72.7	27.5	0.1	0.4	14.1	0.1	15.3	1,134
Female	34.9	58.9	34.5	67.2	25.7	0.7	0.0	11.1	0.1	20.3	1,043
Residence											
Urban	38.7	67.0	52.8	79.2	27.9	0.6	0.0	5.2	0.0	17.1	234
Rural	36.2	60.4	33.8	69.0	26.5	0.4	0.2	13.5	0.1	17.8	1,943
Region											
Northern	24.3	48.5	24.5	59.9	19.6	1.2	0.7	21.0	0.0	19.2	153
Central	32.4	57.8	30.8	67.0	25.2	0.2	0.2	13.8	0.1	19.4	1,083
Southern	43.0	67.0	43.5	75.3	29.3	0.5	0.1	9.9	0.1	15.6	942
District											
Blantyre	47.7	68.7	61.6	82.9	31.4	0.0	0.0	6.8	0.0	12.4	114
Kasungu	23.8	48.3	16.5	55.0	31.2	0.0	0.2	18.4	0.0	23.4	131
Machinga	32.7	57.0	20.8	62.4	33.2	0.0	0.0	7.8	0.6	19.5	78
Mangochi	33.3	59.5	33.3	66.7	31.9	0.8	0.5	9.8	0.0	20.9	142
Mzimba	15.6	41.5	32.9	55.8	20.5	0.7	0.0	28.4	0.0	20.2	99
Salima	43.0	65.9	40.4	77.7	38.7	0.4	0.0	11.5	1.2	13.1	81
Thyolo	53.2	80.2	45.9	85.0	24.0	0.9	0.0	7.6	0.0	9.3	141
Zomba	47.3	68.9	45.7	77.6	33.3	2.0	0.0	3.5	0.6	15.3	120
Lilongwe	29.0	59.5	35.7	69.1	20.0	0.0	0.6	9.6	0.0	21.5	336
Mulanje	34.2	57.5	44.4	68.3	29.4	0.0	0.7	13.3	0.0	24.2	83
Other districts	38.4	61.3	33.4	69.9	25.2	0.4	0.1	14.9	0.0	16.7	854
Education											
No education	29.1	59.1	29.5	68.4	22.4	0.0	0.5	15.0	0.1	19.3	554
Primary 1-4	36.6	58.9	31.4	65.6	25.9	0.8	0.2	14.1	0.0	19.8	724
Primary 5-8	36.7	63.0	41.8	73.2	28.4	0.4	0.0	10.5	0.1	15.4	683
Secondary+	53.9	68.2	48.5	79.5	34.1	0.0	0.3	8.7	0.2	14.2	216
Wealth quintile											
Lowest	34.6	56.0	29.2	64.9	23.6	0.1	0.4	17.3	0.1	18.2	498
Second	40.6	63.4	36.6	72.3	27.2	0.5	0.0	11.8	0.0	17.2	519
Middle	31.7	59.0	31.5	66.5	25.5	0.0	0.1	13.7	0.1	22.0	495
Fourth	35.9	63.6	38.8	74.2	28.0	1.5	0.5	9.7	0.1	15.1	375
Highest	40.9	66.4	49.7	75.9	30.6	0.1	0.0	8.2	0.2	14.1	289
Total	36.4	61.1	35.9	70.1	26.6	0.4	0.2	12.6	0.1	17.7	2,177

¹ Excludes pharmacy, shop, and traditional practitioners.

Treatment-seeking behaviour, particularly the use of ORT, is found most commonly among more educated mothers, mothers in urban areas, and those in the Southern Region. Children age 6-23 months are more likely to get ORS than other children. Other differentials are small.

There are other common responses to diarrhoea; 27 percent of children were given a pill or syrup, and 13 percent were given some type of home remedy. Home remedies, including herbal medicines, are more common in rural areas and in the Northern Region, among children with less educated mothers, and children in households in the lowest wealth quintile.

All mothers of children with diarrhoea in the past two weeks were asked whether they modified the child's feeding practices because of the illness. Table 9.20 indicates that only 36 percent of children with diarrhoea were given more to drink, the recommended action in response to diarrhoea. One in four children were given the same amount as usual, 32 percent were given less than usual, and 8 percent were given no fluids at all, which greatly increases the risks of serious complications and death. Data in Table 9.20 show that only 25 percent of children with diarrhoea received more food, 30 percent were receiving the same amount of food as usual, 35 percent received less food, and 6 percent were given no food at all. Four percent of children were never given food, presumably because they were being exclusively breastfed. These figures reflect a gap in practical knowledge among mothers about the nutritional requirements of children during episodes of diarrhoeal illness.

9.8 WOMEN'S PERCEPTIONS OF PROBLEMS IN ACCESSING HEALTH CARE

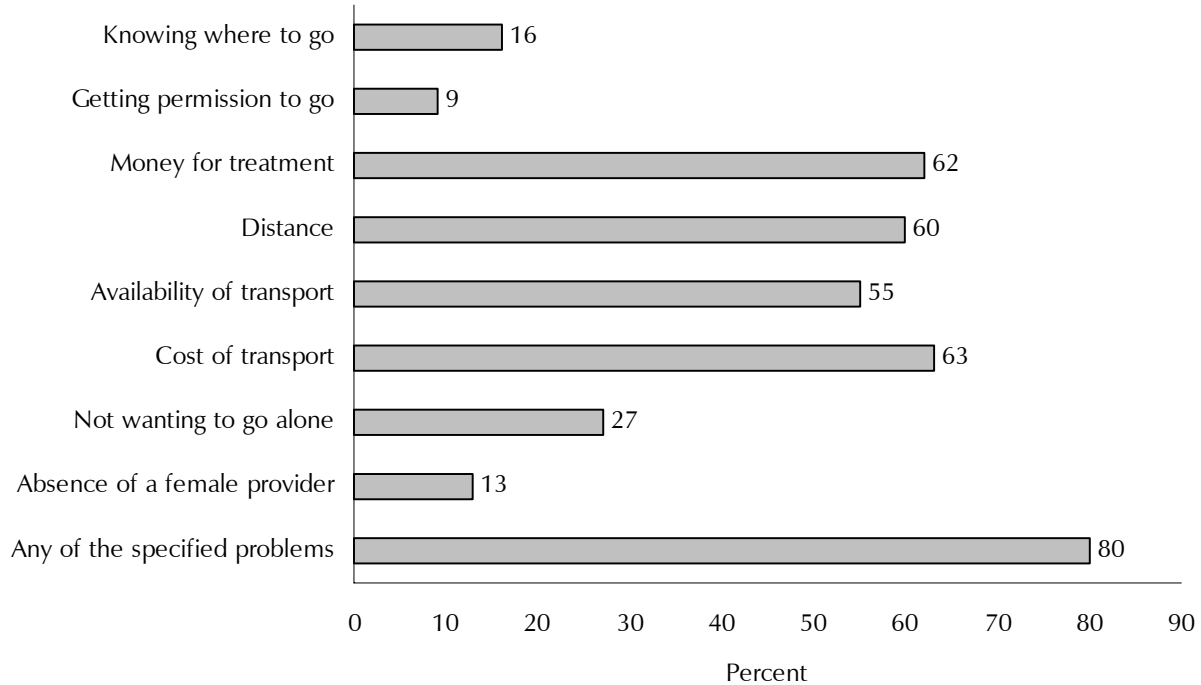
In the 2004 MDHS, all women were asked whether they thought certain issues or circumstances were "a big problem or not" when they are sick and want to get medical advice or treatment. Table 9.21 shows the percentage of women who reported that they have big problems in accessing health care for themselves when they are sick. The most often cited problems have to do with distance and cost. Overall, 63 percent of women mention the cost of transport, 62 percent mention the cost for treatment, 60 percent say that distance to a health facility is a big problem, and 55 percent say that having to take transport is a problem. Additionally, 16 percent of women say that knowledge of a source was a big problem for them in gaining access to health services. Concern that there may not be a female health provider is mentioned by only 13 percent of women (Figure 9.4). More than one-fourth of women (27 percent) say that not wanting to go alone is a big problem in accessing health care for themselves, while only 9 percent say getting permission to go for treatment is a big problem.

Table 9.20 Feeding practices during diarrhoea

Percent distribution of children under five years who had diarrhoea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, Malawi 2004

	Percent
Amount of liquids offered	
Same as usual	24.8
More	35.9
Somewhat less	16.6
Much less	15.1
None	7.5
Don't know/missing	0.2
Total	100.0
Amount of food offered	
Same as usual	30.0
More	25.1
Somewhat less	20.0
Much less	15.1
None	5.7
Never gave food	4.0
Don't know/missing	0.2
Total	100.0
Number of children	2,177

Figure 9.4 Percentage of Women Who Reported They Have Big Problems in Accessing Health Care, by Type of Problem



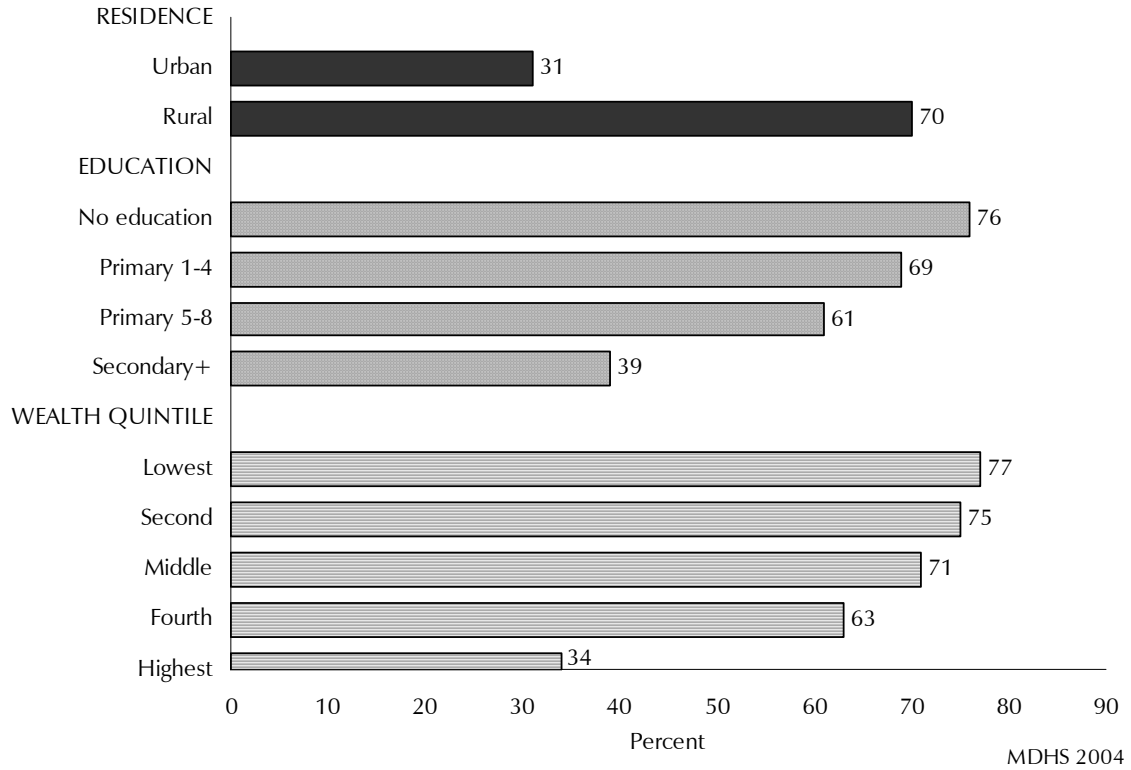
MDHS 2004

In general, older women, rural women, women in the Central Region, less-educated women, women who are not working for cash, and women in the lowest wealth quintiles are more likely than other women to mention specified problems in accessing health care.

Needing permission to obtain treatment is cited as a problem more often by younger women and women with no children. Getting money for treatment, on the other hand, is more often mentioned by older women, women with a large number of children, divorced, separated, or widowed women, rural women, and women living in households in the lowest wealth quintiles.

Not surprisingly, money and distance are the major constraints to women's access to health services. These problems are felt most acutely by women living in remote parts of the country and women living in poorer households. Still, these findings underscore the inequities in real access to health care in the country. As an example, 76 percent of women without formal education mentioned cost of transport as a big problem in getting health services, compared with 39 percent of women with some secondary education (Figure 9.5).

Figure 9.5 Percentage of Women Who Reported the Cost of Transport as a Big Problem in Accessing Health Care



Theresa Banda

Malnutrition remains one of the major public health and developmental problems that Malawians are challenged with. The extent of chronic malnutrition in Malawi has not changed for decades and specific micronutrient deficiencies of vitamin A, iron/folate, and iodine are high as confirmed by the National Micronutrient Survey 2001 (MOHP, 2003b), exerting an additional threat to child and maternal health, and development. There is also an increase in the non-communicable diseases related to nutrition, such as overweight and obesity. Women of reproductive age, infants, and young children are the most vulnerable groups to these diseases. Immediate causes of malnutrition are inadequate dietary intake of various nutrients and frequent infections due to household food insecurity, as well as poor access to high quality health care and environment.

In Malawi, the government and its collaborating partners recognise the consequences of malnutrition and are committed to improve the situation through development and implementation of policies, programmes, and interventions. Some of the interventions include improvement in maternal, infant, and young child feeding practices, increasing micronutrient intake through supplementation, fortification, dietary diversification, and public health measures.

This chapter covers infant and young child feeding practices including breastfeeding and complementary foods; micronutrient intake, anaemia and anthropometric assessment of the nutritional status of children under five years and of women age 15-49.

10.1 BREASTFEEDING

Appropriate feeding practices are important for survival, growth and development of infants and young children and for the wellbeing of mothers. They are one of the major determinants of child nutritional status. Malnutrition in young children exposes them to greater risk of illness and death. The Malawi Ministry of Health promotes exclusive breastfeeding for the first six months of life and continued breastfeeding with appropriate complementary feeding up to two years or beyond. This policy applies to all children unless there are medical indications. This is in line with the UNICEF and WHO Global Strategy on Infant and Young Child Feeding (WHO, 2003). Breastfeeding is convenient and has nutritive and protective properties important for the child's nutritional status. Mothers benefit from breastfeeding through biological suppression of the return to fertile status which contributes to the duration of birth intervals and pregnancy outcomes. These effects are influenced by initiation, duration and intensity of breastfeeding, and by the age when the child receives supplementary foods and liquids.

10.1.1 Initiation of Breastfeeding

Early initiation of breastfeeding (within one hour of birth) facilitates breast milk production and consumption of colostrum which appears right after delivery. Colostrum has a

high concentration of nutrients and antibodies which protect the baby from infection before the baby's immune system has matured. Early initiation also encourages bonding between the mother and the infant and helps to maintain body temperature. Prolactal feeds delay initiation and establishment of effective lactation. It is recommended that children be fed colostrum (the first breast milk) immediately after birth and continue to be exclusively fed at the breast even if regular breast milk has not started to flow.

Table 10.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, and among children ever breastfed, percentage who started breastfeeding within one hour and within one day of birth, and percentage who received a prolactal feed, by background characteristics, Malawi 2004

Background characteristic	Percentage ever breastfed	Number of children	Percentage who started breastfeeding		Percentage who received a prolactal feed ²	Number of children ever breastfed
			Within 1 hour of birth	Within 1 day of birth ¹		
Sex						
Male	98.0	5,381	69.3	96.7	5.9	5,275
Female	98.7	5,390	70.4	96.4	5.0	5,318
Residence						
Urban	98.6	1,425	78.1	97.5	1.5	1,405
Rural	98.3	9,347	68.6	96.4	6.0	9,187
Region						
Northern	98.2	1,345	69.5	97.4	8.1	1,320
Central	98.5	4,494	68.4	95.0	8.6	4,426
Southern	98.3	4,933	71.2	97.8	1.8	4,847
District						
Blantyre	98.9	724	77.5	96.9	1.9	715
Kasungu	98.0	525	56.4	97.6	20.1	515
Machinga	98.5	441	79.4	98.8	0.9	434
Mangochi	97.9	636	78.4	96.9	3.4	622
Mzimba	98.4	676	70.6	98.0	14.7	665
Salima	98.9	312	79.9	97.6	9.5	308
Thyolo	98.4	575	62.0	98.4	1.9	565
Zomba	97.8	544	78.9	96.9	2.0	532
Lilongwe	98.7	1,489	76.6	94.6	4.0	1,470
Mulanje	97.6	437	68.4	98.9	2.3	427
Other districts	98.3	4,414	64.9	96.0	5.0	4,339
Mother's education						
No education	98.7	2,903	68.0	95.8	6.8	2,865
Primary 1-4	98.0	3,102	69.2	95.9	6.1	3,040
Primary 5-8	98.4	3,637	70.8	97.7	4.2	3,578
Secondary+	98.2	1,127	72.8	96.7	3.9	1,107
Assistance at delivery						
Health professional ³	98.4	6,145	72.9	97.3	3.4	6,047
Traditional birth attendant	98.5	2,819	66.4	95.8	7.7	2,778
Other	97.8	1,531	65.8	96.0	7.9	1,496
No one	97.6	221	61.3	96.1	16.1	216
Place of delivery						
Health facility	98.4	5,990	72.6	97.2	3.5	5,891
At home	98.1	3,164	66.8	95.2	8.0	3,105
Other	98.7	1,603	65.9	97.4	7.8	1,582
Wealth quintile						
Lowest	98.9	2,099	66.0	96.6	6.5	2,076
Second	98.4	2,426	67.7	95.6	6.0	2,388
Middle	97.9	2,446	70.4	96.3	6.3	2,394
Fourth	98.1	2,091	70.9	97.3	4.8	2,052
Highest	98.4	1,709	75.3	97.5	3.0	1,682
Total	98.3	10,771	69.8	96.6	5.4	10,593

Note: Table is based on all births whether the children are living or dead at the time of interview. Total includes some children with no information on assistance at delivery and place of delivery.

¹ Includes children who started breastfeeding within one hour of birth.

² Children given something other than breast milk during the first three days of life before the mother started breastfeeding regularly.

³ Doctor, clinical officer, nurse, midwife, or patient attendant

Table 10.1 shows that almost all (98 percent) children born in the five years preceding the survey were breastfed for some period of time. Almost all of these children were breastfed within 24 hours (97 percent), while 70 percent were breastfed within one hour of birth. There are minor differences according to background characteristics. However, urban children, children who were assisted at delivery by medically-trained health professionals, and those delivered in a health facility are more likely to be breastfed within the recommended one hour of birth. The likelihood of a child being breastfed within one hour after birth is positively related with the mother's education and wealth status.

Only 5 percent of children were given prelacteal feeds (Table 10.1). However, this is more than double the percentage reported in the 2000 MDHS (2 percent). There are variations within subgroups of children. Rural children, children in the Northern and Central Regions, children of less educated mothers, those who were born outside a health facility and in the lower wealth quintiles are more likely than other children to be given prelacteal feeds. Children whose mothers did not receive assistance from anyone during delivery are much more likely to receive prelacteal feeds (16 percent). It is interesting to note that children in Kasungu and Mzimba, both of which are in the Northern Region, are much more likely than children in other districts to be given prelacteal feeds (20 and 15 percent, respectively).

10.1.2 Age Pattern of Breastfeeding

Breast milk contains all the nutrients and fluids needed by the baby in the first six months of life. Supplementing breast milk before six months is not necessary and is strongly discouraged because of the likelihood of contamination and resulting risk of diarrhoeal diseases. Early introduction of liquids and solids reduces breast milk output because the production and release of milk is influenced by the frequency and intensity of suckling. In line with UNICEF and WHO's recommendation, the Ministry of Health recommends that all children should be given breast milk with no supplementary liquid or solid food during the first six months of life. Children should be given solid or semisolid complementary food beginning in the seventh month of life unless medically indicated.

Table 10.2 and Figure 10.1 show data on the breastfeeding status of young children from birth up to three years of age. Table 10.2 shows that virtually all (99 percent) children are breastfed for at least a year. By 16-19 months, 92 percent of children are still breastfeeding and 80 percent are still breastfeeding toward their second birthday. While far fewer children are still being breastfed in the third year, 13 percent of children are still breastfeeding at age 32-35 months.

More than half (53 percent) of children under six months are exclusively breastfed, compared with 45 percent in the 2000 MDHS. This shows great improvement since the early 1990s when exclusive breastfeeding even for the first four months was almost non-existent (3 percent in the 1992 MDHS). The improvement in exclusive breastfeeding could be attributed to the continued support of the Ministry of Health and its key collaborators through programmes such as Baby Friendly Hospital Initiative (BFHI). It should also be noted that the questions about complementary feeding changed somewhat between the surveys.

A large increase is observed in the percentage of children under 4 months of age that are given plain water in addition to breast milk. Twenty-six percent of children 4-5 months are given plain water in 2004 compared with 3 percent in the 2000 MDHS. On the other hand, introduction of complementary foods to children 4-5 months has declined from 80 percent in the 2000 MDHS to 37 percent in the 2004 MDHS survey. These figures suggest that in 2004 children were much more likely to be given plain water than complementary foods as is the case in 2000.

Table 10.2 Breastfeeding status by age

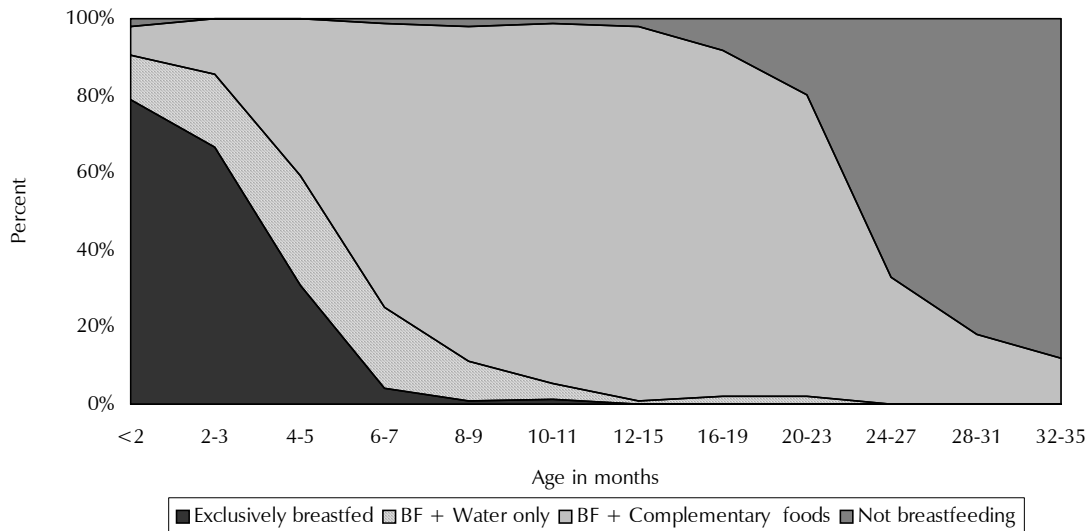
Percent distribution of youngest children under three years living with the mother by breastfeeding status and percentage of children under three years using a bottle with a nipple, according to age in months, Malawi 2004

Age in months	Breastfeeding and consuming:						Total	Number of children	Percentage using a bottle with a nipple ¹	Number of children
	Not breast-feeding	Exclusively breastfed	Plain water only	Water-based liquids/juice	Other milk	Complementary foods				
<2	1.6	75.2	11.2	3.9	1.7	6.5	100.0	316	1.6	326
2-3	0.0	59.2	17.2	6.7	3.9	13.1	100.0	415	2.9	419
4-5	0.5	27.5	26.1	6.6	2.0	37.1	100.0	361	3.4	363
6-7	1.2	3.8	20.0	4.3	0.9	69.9	100.0	416	6.3	420
8-9	1.5	0.9	10.3	1.0	0.0	86.3	100.0	400	4.9	402
10-11	1.2	1.0	4.4	1.9	0.6	91.0	100.0	364	8.2	366
12-15	2.3	0.3	1.1	0.7	0.0	95.5	100.0	783	4.6	795
16-19	7.9	0.3	2.0	0.2	0.2	89.4	100.0	709	5.3	740
20-23	19.7	0.0	1.5	0.0	0.2	78.6	100.0	615	5.0	660
24-27	66.6	0.0	0.3	0.0	0.0	33.1	100.0	465	2.5	584
28-31	82.4	0.1	0.0	0.0	0.0	17.5	100.0	437	3.4	597
32-35	87.4	0.1	0.6	0.0	0.0	11.9	100.0	358	2.2	562
<6	0.6	53.3	18.4	5.9	2.6	19.1	100.0	1,092	2.7	1,109
6-9	1.4	2.4	15.2	2.7	0.5	77.9	100.0	815	5.6	822

Note: Breastfeeding status refers to a '24-hour' period (yesterday and last night). Children classified as *breastfeeding and consuming plain water only* consume no supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, water-based liquids/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and water-based liquids and who do not receive complementary foods are classified in the water-based liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

¹Based on all children under three years

Figure 10.1 Distribution of Children by Breastfeeding (BF) Status, According to Age



MDHS 2004

Another indicator of infant feeding in Table 10.2 is the percentage of children who are fed using a bottle with a nipple. Bottle-feeding is not recommended in Malawi even when breastfeeding is contraindicated, as when a mother who is HIV positive has chosen replacement feeding. Replacement feeds are supposed to be given using a cup and not a bottle with a nipple. The use of a bottle with a nipple, regardless of the contents requires hygienic handling and causes nipple confusion in breastfeeding children. The 2004 MDHS findings indicate that use of feeding bottles in children under age 6 months has remained at the same level as in the 2000 MDHS (about 3 percent).

Table 10.3 shows that the median duration of breastfeeding in Malawi is 23.2 months, one month shorter than in the 2000 MDHS. The median duration of exclusive breastfeeding is 2.5 months, whereas the median for predominant breastfeeding is 4.8 months, twice as long as that reported in 2000 (2-4 months).

Overall, 98 percent of breastfed children are breastfeeding on demand (six or more times in the last 24 hours) with a median of 8.9 times during the day and 6.6 times at night. There are small differences in the frequency of breastfeeding across background characteristics. However, children in the Northern Region are fed less frequently than children in the Central and Southern regions. For example, children in the Northern Region are fed on average 7.3 times during the day, compared with 9 or more times in the other two regions. Children in Blantyre, Mangochi, Salima, and Lilongwe are in general breastfed more frequently than children in other districts.

Table 10.3 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, percentage of breastfeeding children under six months living with the mother who were breastfed six or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by background characteristics, Malawi 2004

Background characteristic	Median duration (months) of breastfeeding ¹			Number of children	Breastfeeding children under six months ²			
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding ³		Percentage breastfed 6+ times in past 24 hours	Mean number of day feeds	Mean number of night feeds	Number of children
Sex								
Male	23.4	2.1	4.6	3,340	96.8	9.0	6.7	552
Female	23.0	3.0	5.0	3,375	98.4	8.9	6.5	546
Residence								
Urban	22.8	3.2	4.3	910	98.4	9.6	7.1	121
Rural	23.2	2.4	4.9	5,805	97.5	8.9	6.5	977
Region								
Northern	23.1	2.6	5.3	824	97.6	7.3	5.2	127
Central	23.0	2.2	4.6	2,816	97.6	9.3	6.7	482
Southern	23.4	2.8	4.8	3,075	97.6	9.0	6.9	488
District								
Blantyre	23.8	1.3	4.5	440	97.5	11.8	8.5	76
Kasungu	23.3	0.8	5.8	314	95.3	8.0	5.3	52
Machinga	24.6	3.2	4.3	272	96.6	8.0	5.9	50
Mangochi	23.4	3.0	5.5	407	97.2	10.5	8.7	71
Mzimba	23.7	2.1	4.6	413	95.1	7.3	4.8	62
Salima	22.8	1.8	2.9	201	100.0	11.0	7.1	31
Thyolo	23.3	3.4	4.7	351	96.2	6.8	4.5	53
Zomba	23.0	4.0	5.3	337	94.2	6.9	5.6	51
Lilongwe	22.9	3.4	5.0	944	96.3	10.3	7.0	166
Mulanje	22.8	4.0	5.1	273	97.4	8.4	7.8	43
Other districts	22.9	2.1	4.6	2,763	99.3	8.5	6.5	444
Mother's education								
No education	24.1	1.9	4.8	1,697	99.1	8.9	6.7	262
Primary 1-4	23.1	2.6	4.5	1,951	95.0	8.9	6.6	326
Primary 5-8	22.9	2.6	5.1	2,295	98.1	8.9	6.6	387
Secondary+	22.6	3.2	4.7	771	99.4	9.1	6.2	122
Wealth quintile								
Lowest	24.8	2.6	4.6	1,328	95.2	9.1	6.3	227
Second	22.9	2.0	4.4	1,550	98.4	8.5	6.5	267
Middle	23.2	2.2	5.0	1,492	98.2	8.9	6.5	236
Fourth	22.9	3.0	5.2	1,278	98.0	9.0	6.8	202
Highest	22.8	3.2	4.7	1,066	98.3	9.5	6.9	166
Total	23.2	2.5	4.8	6,715	97.6	8.9	6.6	1,098
Mean for all children	23.1	3.6	5.9	na	na	na	na	na

Note: Median and mean durations are based on current status.

na = Not applicable

¹ It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding.

² Excludes children who do not have a valid answer on the number of times breastfed

³ Either exclusively breastfed or received breast milk and plain water, water-based liquids, and/or juice only (excludes other milk)

10.2 COMPLEMENTARY FEEDING

Breastfeeding alone is not adequate to meet child's nutritional needs after the age of six months. Mothers are encouraged to introduce adequate, safe and high quality complementary foods to the child after six months. Any food or drink given to a child before six months of age is considered to be a supplement. Complementary foods are only those that are given to the child from six months of age. This is a critical stage as the child is put at increased risk of malnutrition and illness if foods are introduced before six months of age or if foods are exposed to unhygienic conditions. On the other hand, delays in introduction of complementary foods can cause the child's growth to falter. It is recommended that by nine months all children are given complementary foods and from 6-18 months children should be fed meals that are both energy and nutrient dense and easy to digest at least four times daily.

10.2.1 Type of Complementary Foods

In Malawi, most of the complementary foods are made from grains or cereal and prepared in the form of porridge where a legume, milk or milk products, meat, and oil may be added to enrich it. Table 10.4 shows that 91 percent of breastfeeding children 6-9 months are fed some semi-solid or solid foods. Most children age 6-9 months receive foods made from grains (73 percent), while 50 percent are fed fruits and vegetables, 16 percent are fed foods made from legumes, and 11 percent receive foods made from roots and tubers. Almost half (48 percent) of children 6-9 months are given fruits and vegetables rich in vitamin A, while over one-fifth are given meat, fish, poultry, or eggs.

The pattern of food consumption among children 6-9 months is similar to that reported in the 2000 MDHS, with a slight decrease in the consumption of foods rich in vitamin A from 54 percent in the 2000 MDHS to 48 percent in the 2004 MDHS and a slight increase in consumption of other fruits and vegetables. The decline in the consumption of food groups like grains, may be partly due to a less detailed questionnaire used in the 2004 MDHS. In the 2000 MDHS, two specific types of foods are listed in the questionnaire, porridge and *thobwa*. These items are not listed separately in 2004. The sharpest percentage change is in the consumption of liquids other than milk.

Only 4 percent of breastfeeding children age 6-9 months were fed infant formula. Effective utilisation of vitamin A in the body requires oil-rich foods. Figures in Table 10.4 show that complementary feeding is still a problem in Malawi, in that consumption of high energy and nutrient dense foods such as legumes, meats, fish eggs, milk and milk products, and oil is very low. This means that children are unable to get the required nutrients from the foods they consume, which may result in long-term nutrition problems.

Table 10.4 Foods consumed by children in the day or night preceding the interview

Percentage of youngest children under three years of age living with the mother who consumed specific foods in the day or night preceding the interview, by breastfeeding status and age, Malawi 2004

Age in months	Infant formula	Other milk/cheese/yoghurt	Other liquids ¹	Food made from grains	Fruits/vegetables ²	Food made from roots/tubers	Food made from legumes	Meat/fish/shellfish/poultry/eggs	Food made with oil/fat/butter	Fruits and vegetables rich in vitamin A ³	Any solid or semisolid food	Number of children
BREASTFEEDING CHILDREN												
<2	1.2	4.4	6.2	4.6	1.5	0.4	0.1	1.3	1.4	1.5	8.1	311
2-3	4.2	2.8	10.0	10.6	3.6	1.2	2.7	1.7	1.7	3.6	24.3	415
4-5	3.0	4.7	17.5	30.8	13.1	2.6	7.2	5.6	1.4	12.3	62.1	359
6-7	3.9	7.6	23.0	64.7	38.0	7.0	11.7	16.8	2.1	35.6	87.6	411
8-9	4.4	9.0	25.2	81.6	63.1	15.4	21.1	28.5	4.5	60.2	95.2	394
10-11	5.0	10.5	30.6	86.8	72.6	24.4	26.2	32.9	5.1	69.9	96.8	360
12-15	3.8	11.1	33.2	92.8	85.2	31.0	35.1	39.1	7.7	81.2	99.3	765
16-19	5.4	9.0	30.9	91.8	88.9	35.9	34.7	43.6	6.5	87.5	98.8	653
20-23	3.3	11.2	33.9	93.8	89.2	29.7	36.0	44.7	7.9	87.5	99.0	493
24-35	2.2	9.1	29.6	94.7	91.6	37.3	33.7	39.3	6.0	90.2	98.8	277
<6	2.9	3.9	11.4	15.6	6.1	1.4	3.5	2.9	1.5	5.9	32.1	1,086
6-9	4.2	8.3	24.1	73.0	50.3	11.1	16.3	22.5	3.3	47.6	91.3	804
NONBREASTFEEDING CHILDREN												
<15	(27.2)	(17.4)	(51.0)	(62.3)	(60.2)	(27.3)	(26.9)	(23.4)	(3.0)	(60.2)	(88.6)	40
16-19	13.8	23.8	43.9	97.0	93.7	35.0	35.9	54.4	17.9	92.6	98.1	56
20-23	5.1	13.1	41.9	96.4	91.4	39.9	26.8	57.6	6.5	89.6	100.0	121
24-35	6.1	18.4	39.1	97.2	92.6	42.0	41.3	51.8	7.7	91.1	99.8	982

Note: Breastfeeding status and food consumed refer to a '24-hour' period (yesterday and last night). Figures in parentheses are based on 25-49 un-weighted cases.

¹Does not include plain water

²Includes fruits and vegetables rich in vitamin A

³Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A

10.2.2 Frequency of Foods Consumed by Children

Table 10.5 shows the frequency of foods consumed by children in the day and night preceding the survey. The table shows that children 6-9 months consumed foods made from grain and fruits and vegetables rich in vitamin A at least once in the past 24 hours. Consumption of other types of foods is very infrequent.

Nonbreastfeeding children are more likely to eat solid food than breastfeeding children. These children on average ate foods made from grains two times a day, fruits and vegetables four times, and fruits and vegetables rich in vitamin A three times a day. Foods which are sources of protein are consumed less than once a day.

Table 10.5 Frequency of foods consumed by children in the day or night preceding the interview

Mean number of times specific foods were consumed in the day or night preceding the interview by youngest children under three years of age living with the mother, according to breastfeeding status and age, Malawi 2004

Age in months	Infant formula	Other milk/cheese/yoghurt	Other liquids ¹	Food made from grains	Fruits/vegetables ²	Food made from roots/tubers	Food made from legumes	Meat/fish/shellfish/poultry/eggs	Food made with oil/fat/butter	Fruits and vegetables rich in vitamin A ³	Number of children
BREASTFEEDING CHILDREN											
<2	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	311
2-3	0.1	0.1	0.2	0.2	0.1	0.0	0.1	0.0	0.0	0.1	415
4-5	0.0	0.2	0.3	0.6	0.4	0.0	0.1	0.1	0.0	0.3	359
6-7	0.0	0.1	0.4	1.2	1.0	0.1	0.2	0.2	0.0	0.7	411
8-9	0.1	0.2	0.5	1.6	1.6	0.2	0.3	0.4	0.1	1.3	394
10-11	0.1	0.2	0.6	1.8	2.2	0.3	0.4	0.5	0.1	1.8	360
12-15	0.1	0.2	0.7	2.1	2.8	0.5	0.5	0.6	0.1	2.2	765
16-19	0.1	0.2	0.6	2.1	3.0	0.5	0.5	0.7	0.1	2.5	653
20-23	0.0	0.2	0.8	2.2	3.2	0.4	0.5	0.7	0.1	2.7	493
24-35	0.0	0.1	0.6	2.2	3.3	0.6	0.6	0.6	0.1	2.7	277
<6	0.1	0.1	0.3	0.3	0.2	0.0	0.1	0.0	0.0	0.1	1,086
6-9	0.1	0.2	0.4	1.4	1.3	0.1	0.2	0.3	0.0	1.0	804
NONBREASTFEEDING CHILDREN											
<15	(0.1)	(0.0)	(0.1)	(0.0)	(0.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	40
16-19	0.2	0.5	1.0	2.5	4.0	0.7	0.5	0.8	0.3	3.2	56
20-23	0.1	0.3	0.8	2.5	3.5	0.5	0.4	0.9	0.1	2.8	121
24-35	0.1	0.3	0.8	2.4	3.8	0.6	0.6	0.8	0.1	3.1	982

Note: Breastfeeding status and food consumed refer to a '24-hour period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases.

¹Does not include plain water

²Includes fruits and vegetables rich in vitamin A

³Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables rich in vitamin A

10.3 MICRONUTRIENTS

In Malawi micronutrient deficiencies of vitamin A, iodine, and iron/folate are public health concerns. According to the 2001 National Micronutrient Survey (MOHP, 2003b), about 60 percent of children under five, 57 percent of nonpregnant women, and 38 percent of men and school-age children have sub-clinical vitamin A deficiency. The survey also reported that 80 percent of children under five, 27 percent of nonpregnant women, and 17 percent of men have anaemia. Sixty percent of anaemia among children under three years of age was due to iron deficiency. The government and its collaborating partners have developed an action plan which promotes supplementation, fortification, and dietary diversification as strategies to deal with micronutrient deficiencies. The 2004 MDHS collected data that will be used to assess the coverage of vitamin A and iron/folate supplementation, consumption of foods rich in vitamin A, and of vitamin A status of mothers through the assessment of night blindness.

10.3.1 Micronutrient Intake among Children

Vitamin A is essential for good vision, resistance to infections, growth, and development. Vitamin A is believed to improve immunity and has been shown to contribute to the reduction of morbidity and mortality. The Ministry of Health's policy is to supplement children age 6-59 months with a vitamin A capsule once every six months. Table 10.6 shows that 65 percent of children under age three had consumed fruits and vegetables rich in vitamin A in the 24 hours preceding the survey and 65 percent of children had received a vitamin A capsule in the last six months preceding the survey.

There are small differences in vitamin A supplementation across children's background characteristics. Consumption of foods rich in vitamin A increases with age. Whereas less than half of the children 6-9 months (47 percent) consumed foods rich in vitamin A, nine in ten children 24-35 months did. Non-breastfeeding children, children in urban areas, and children in the highest wealth quintile are more likely to consume foods rich in vitamin A than other children. Vitamin A supplementation is higher than the national average in most of the oversampled districts. However, the coverage is only 53 percent in Machinga and Mzimba.

The coverage of vitamin A supplementation declines after the child's second year of life. This is a reflection of reduced attendance at Growth Monitoring and Promotion Centres where supplementation is done routinely as part of the Expanded Programme on Immuni-

Table 10.6 Micronutrient intake among children

Percentage of youngest children under age three living with the mother who consumed fruits and vegetables rich in vitamin A in the 24 hours preceding the survey, and percentage of children age 6-59 months who received vitamin A supplements in the six months preceding the survey, by background characteristics, Malawi 2004

Background characteristic	Foods rich in vitamin A ¹	Number of children	Vitamin A supplements in the past 6 months	Number of children
Age in months				
<6	5.9	1,092	na	0
6-9	47.2	815	65.8	822
10-11	70.2	364	73.3	366
12-23	85.5	2,107	75.6	2,194
24-35	90.9	1,259	67.5	1,743
36-47	na	0	58.8	1,741
48-59	na	0	55.6	1,802
Sex				
Male	64.3	2,809	65.2	4,281
Female	65.2	2,829	65.6	4,388
Birth order				
1	64.8	1,232	64.6	2,019
2-3	64.4	2,130	66.9	3,197
4-5	65.7	1,242	66.1	1,893
6+	64.6	1,035	62.5	1,560
Breastfeeding status				
Breastfeeding	58.0	4,438	73.0	3,432
Not breastfeeding	89.8	1,186	60.5	5,194
Residence				
Urban	73.5	799	68.3	1,217
Rural	63.3	4,839	64.9	7,451
Region				
Northern	68.2	703	63.9	1,108
Central	63.7	2,323	66.8	3,586
Southern	64.8	2,612	64.6	3,973
District				
Blantyre	62.8	385	68.9	594
Kasungu	64.8	266	60.5	419
Machinga	62.8	229	53.4	355
Mangochi	63.4	331	66.7	495
Mzimba	67.9	360	52.8	567
Salima	60.6	165	79.7	250
Thyolo	70.5	292	65.1	458
Zomba	67.5	290	70.6	448
Lilongwe	66.4	783	67.9	1,210
Mulanje	70.0	223	69.9	332
Other districts	63.2	2,315	65.5	3,541
Mother's education				
No education	63.8	1,405	60.9	2,331
Primary 1-4	62.1	1,610	65.9	2,477
Primary 5-8	66.2	1,937	66.1	2,923
Secondary+	69.0	685	73.1	936
Mother's age at birth				
<20	65.8	1,035	63.5	1,779
20-24	64.7	1,971	68.1	2,967
25-29	62.7	1,187	66.4	1,774
30-34	66.8	777	63.7	1,152
35-49	64.9	668	61.2	997
Wealth quintile				
Lowest	58.6	1,100	60.8	1,660
Second	64.3	1,271	64.5	1,901
Middle	65.5	1,242	66.1	1,970
Fourth	65.4	1,092	67.7	1,710
Highest	71.0	933	68.3	1,427
Total	64.8	5,638	65.4	8,668

Note: Information on vitamin A supplements is based on mother's recall. Total includes some children with missing information on breastfeeding status.

na = Not applicable

¹Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A

zation (EPI). It has been established that most children above two years of age do not attend under-five clinics regularly. The Ministry of Health and its partners complement routine services with campaigns or child health days to achieve the target that 80 percent of children under five receive vitamin A supplementation every six months by 2009.

10.3.2 Micronutrient Intake among Women

Provision of vitamin A supplements to women after delivery of a child is intended to boost stores and ensure adequate delivery of this essential micronutrient to the child in breast milk. In the 2004 MDHS, women who had a live birth in the five years before the survey were asked whether they had received a vitamin A supplement in the two-month period after delivery of their last child.¹ The women were also asked whether they had experienced any vision problems during the night time and (in a separate question) during the day.² Night blindness in pregnancy is a common manifestation of vitamin A deficiency (VAD).

Table 10.7 shows that 41 percent of women received a vitamin A supplement during the postnatal period. This is the same level as that reported in the 2000 MDHS. Variations in postpartum vitamin A supplementation by age of the mother and child's birth order are minimal. Supplementation is higher in urban areas, in the Northern Region, among women with more education, and among women in the higher wealth quintiles. Larger variations are found among the districts, ranging from 32 percent in Lilongwe to 53 percent in Mzimba.

Table 10.7 also shows that about 6 percent of women with a recent birth experienced night blindness, an indicator of VAD. The small percentages make it difficult to examine variations among subgroups of women.

Iron-deficiency anaemia is a major threat to maternal health; it contributes to low birth weight, lowered resistance to infection, poor cognitive development, and decreased work capacity. Further, anaemia increases morbidity from infections because it adversely affects the body's immune response. The 2004 MDHS collected data from women who had a recent birth about whether they had received or purchased any iron tablets during their last pregnancy. If so, the woman was asked to report the number of days that the tablets were actually taken during that pregnancy. Interviewers assisted the respondent in converting responses provided on a daily or weekly basis to total number of days over the course of the pregnancy. Table 10.7 shows that 18 percent of women reported taking iron supplements on at least 90 days during the pregnancy, as recommended. This is an increase from 12 percent reported in the 2000 MDHS. Iron supplementation coverage is highest in Thyolo (24 percent) and lowest in Salima and Mangochi (7 and 10 percent, respectively).

¹When the question was asked, the interviewer showed a vitamin A capsule to the respondent.

²Women are considered to experience night blindness if they report vision problems during the night, but not during the day.

10.4 PREVALENCE OF ANAEMIA IN CHILDREN

Anaemia is a serious concern for young children because it can result in impaired cognitive performance, behavioural and motor development, coordination, language development, and scholastic achievement, as well as increased morbidity from infectious diseases. Information on the prevalence of anaemia can be useful for the development of health intervention programmes designed to prevent anaemia, such as iron fortification programmes.

Table 10.8 shows that 73 percent of children age 6-59 months are anaemic, 26 percent have mild anaemia, 42 percent with moderate anaemia, while 5 percent showed severe anaemia. No substantial differences were reported among girls and boys. However, the level of severe anaemia decreases with the age of the child. For example, 19 percent of children age 10-11 months were found to be severely anaemic compared to 2 percent among children age 48-59 months. Anaemia is related to the child's birth order and the interval with their older siblings. First births tend to have severe anaemia compared with their siblings. Similarly, children of sixth or higher birth order and children born 48 months or more after a previous sibling are more likely to have severe anaemia. Children from rural areas, children in the Central Region, children whose mother have no education, and children of young mothers are more susceptible to severe anaemia compared with other children. Severe anaemia is most prevalent in Thyolo, Lilongwe, and Salima Districts (7 percent or higher).

Background characteristic	Any anaemia	Anaemia status			Number of children
		Mild (10.0-10.9 g/dl)	Moderate (7.0-9.9 g/dl)	Severe (below 7.0 g/dl)	
Age in months					
6-9	91.3	15.9	62.4	13.0	160
10-11	88.0	21.2	47.5	19.4	82
12-23	83.8	20.8	55.7	7.3	552
24-35	73.6	27.6	43.0	3.0	446
36-47	62.5	28.1	33.0	1.3	471
48-59	62.2	34.7	25.7	1.8	463
Sex					
Male	73.9	25.4	43.4	5.0	1,060
Female	72.5	27.3	40.6	4.6	1,113
Birth order¹					
1	74.2	29.8	37.6	6.7	393
2-3	73.9	22.9	47.1	3.9	720
4-5	73.4	27.8	41.1	4.5	471
6+	75.0	24.5	43.3	7.2	372
Birth interval in months					
First birth ²	74.1	29.6	37.8	6.7	396
<24	72.0	26.9	41.6	3.5	226
24-47	73.5	24.5	44.4	4.6	980
48+	76.6	24.3	46.0	6.3	354
Residence					
Urban	65.4	22.8	40.8	1.8	231
Rural	74.1	26.8	42.1	5.2	1,942
Region					
Northern	71.7	29.5	38.9	3.2	309
Central	74.0	26.6	42.1	5.3	824
Southern	73.0	25.3	42.8	4.9	1,040

Continued ...

Table 10.8 Prevalence of anaemia in children (continued)

Percentage of children age 6-59 months classified as having anaemia, by background characteristics, Malawi 2004

Background characteristic	Any anaemia	Anaemia status			Number of children
		Mild (10.0-10.9 g/dl)	Moderate (7.0-9.9 g/dl)	Severe (below 7.0 g/dl)	
District					
Blantyre	69.0	26.8	36.7	5.6	128
Kasungu	74.9	26.3	46.0	2.7	116
Machinga	71.1	20.8	44.2	6.1	93
Mangochi	73.0	25.8	44.3	2.9	131
Mzimba	73.6	29.3	41.4	2.9	159
Salima	81.9	27.9	47.1	6.9	68
Thyolo	70.0	22.2	40.0	7.9	109
Zomba	76.4	22.9	47.6	5.9	119
Lilongwe	72.8	21.4	44.7	6.7	180
Mulanje	80.3	26.7	51.0	2.7	86
Other districts	72.5	28.2	39.7	4.6	985
Mother's education					
No education	75.4	24.3	44.9	6.2	560
Primary 1-4	77.6	29.2	44.6	3.8	573
Primary 5-8	72.2	24.4	42.3	5.5	681
Secondary+	64.5	26.0	33.8	4.7	200
Mother's age³					
15-19	80.2	22.2	46.3	11.7	115
20-24	75.6	24.8	46.1	4.7	625
25-29	70.5	24.6	42.3	3.7	532
30-34	72.4	31.3	34.5	6.6	373
35-49	75.4	25.8	45.2	4.4	371
Mother's status					
Mother interviewed	74.0	25.8	43.0	5.2	1,956
Mother not interviewed, but in household	68.9	31.1	35.8	1.9	60
Mother not interviewed, and not in household ⁴	64.2	31.9	31.5	0.8	158
Wealth quintile					
Lowest	78.2	27.3	45.8	5.1	414
Second	77.2	25.0	45.5	6.7	490
Middle	72.6	24.9	42.5	5.3	537
Fourth	72.4	28.1	39.8	4.6	454
Highest	60.9	27.6	32.7	0.6	280
Total	73.2	26.4	42.0	4.8	2,173

Note: Table is based on children who stayed in the household the night before the interview in a subsample of households. Prevalence is adjusted for altitude using formulas recommended by CDC (CDC, 1989).

g/dl = grams per deciliter

¹Excludes children whose mothers were not interviewed

²First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

³For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the household schedule

⁴Includes children whose mothers are deceased

Table 10.10 Prevalence of anaemia in children by anaemia status of mother

Percentage of children age 6-59 months classified as having anaemia, by anaemia status of mother, Malawi 2004

Anaemia status of mother	Any anaemia	Anaemia status of child			Number of children
		Mild (10.0-10.9 g/dl)	Moderate (7.0-9.9 g/dl)	Severe (below 7.0 g/dl)	
Any anaemia	81.4	26.1	49.0	6.3	737
Anaemia status					
Mild anaemia	81.3	28.2	47.1	6.0	571
Moderate anaemia	83.3	20.3	56.2	6.7	145
Severe anaemia	(72.3)	(10.1)	(51.5)	(10.7)	21
Total	73.8	25.7	43.3	4.7	1,756

Note: Table is based on children who stayed in the household the night before the interview. Prevalence is adjusted for altitude (and for smoking in the case of mothers with information on smoking status) using formulas in CDC, 1989. Table includes only cases with anaemia measurements for both mothers and children. Figures in parentheses are based on 25-49 unweighted cases.

10.5 NUTRITIONAL STATUS

10.5.1 Nutritional Status of Children

Nutritional status is an important health indicator as it allows evaluation of the susceptibility of the population to disease, impaired mental development, and early death. Three standard indicators of growth for children are used in this report, based on the relationship between height, weight, and age. The indicators are height-for-age, weight-for-height, and weight-for-age. A child is considered stunted if he is too short for his age, which indicates chronic undernutrition, typically due to poor nutrition over an extended period. A child is considered wasted if he is too thin, i.e., weighs too little for his height. Wasting is an indicator of acute or recent nutritional deficits and is closely tied to mortality risk. Finally, a child is considered underweight if he weighs too little for his age. A child can be underweight for his age because he is stunted, wasted, or both.

To allow standardised measurement over time and between settings, height and weight data are routinely compared to a reference population. The World Health Organisation (WHO) recommends using the child population data maintained by the NCHS (U.S. National Center for Health Statistics) as reference. The reference population serves as a point of comparison, facilitating the examination of differences in the anthropometric status of subgroups in a population and of changes in nutritional status over time. The data from the reference population have been normalised to produce a distribution in which the mean coincides with the median. The use of the international reference population is based on the finding that well-nourished children of all population groups for which data exist follow very similar growth patterns before puberty.

A presentation of anthropometric status of young children complements the information on feeding practices. Nutritional status, along with mortality rates, represents an outcome measure. The status of a child with regard to stunting, wasting, and underweight is determined by how many statistical units, called standard deviations, the child is measured below the mean of the NCHS reference population. If a child is between two and three standard deviations below the mean, the child is considered moderately malnourished (stunted, wasted, or underweight); if

the child is three or more standard deviations below the mean, the child is considered severely malnourished.

In the 2004 MDHS, the height and weight of children under age five were measured in order to estimate their nutritional status. Table 10.11 shows that 48 percent of children under five in Malawi are stunted, or too short for their age, 5 percent of children are wasted or too thin, and 22 percent are underweight. Data in Table 10.11 indicate further that 22 percent of children are severely stunted. Children's nutritional status in 2004 is similar to the status in 1992 and 2000, indicating that there has been no improvement in the nutritional status of children under five since 1992.

In general, there are only small differences in nutritional status between boys and girls. However, stunting varies substantially across subgroups of children. Older children, children born less than 24 months after their older sibling, children whose birth size is small, children who live in rural areas or in the Central Region, children whose mothers have less education, children not living with their mothers, and children in the lower wealth quintiles are more likely than other children to be stunted. Stunting ranges from 42 percent in Zomba to 56 percent in Kasungu.

Variations in wasting across subgroups of children are less notable than those for stunting. Variations in underweight, however, are more apparent. For example, children whose mothers are uneducated are twice as likely to be underweight as children whose mothers have secondary or higher education (26 and 13 percent, respectively). Similarly, children in the lowest wealth quintile are twice as likely to be underweight as children in the highest quintile (28 and 13 percent, respectively).

Table 10.11 Nutritional status of children (continued)

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Malawi 2004

Background characteristic	Height-for-age			Weight-for-height			Weight-for-age			Number of children
	Percent-age below -3 SD	Percent-age below -2 SD ¹	Mean Z-score (SD)	Percent-age below -3 SD	Percentage below -2 SD ¹	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD ¹	Mean Z-score (SD)	
Mother's education⁴										
No education	25.6	52.4	(2.0)	2.1	5.8	(0.0)	6.6	26.2	(1.2)	2,130
Primary 1-4	25.2	52.2	(1.9)	1.8	5.3	0.1	4.2	24.4	(1.1)	2,276
Primary 5-8	18.6	43.8	(1.7)	1.4	4.8	0.1	4.1	19.2	(1.0)	2,718
Secondary+	13.0	33.1	(1.4)	1.2	4.8	0.1	2.1	12.9	(0.8)	841
Mother's age⁴										
15-19	15.6	41.6	(1.5)	2.8	7.3	0.1	4.1	21.9	(0.9)	493
20-24	21.4	46.9	(1.8)	1.7	5.1	0.1	4.9	21.0	(1.0)	2,510
25-29	20.0	46.5	(1.8)	1.7	5.4	0.0	3.4	20.6	(1.1)	2,171
30-34	24.6	51.0	(1.9)	1.6	5.5	0.0	5.9	25.0	(1.2)	1,321
35-49	24.5	48.1	(1.9)	1.2	4.1	0.0	4.9	22.6	(1.2)	1,475
Mother's status										
Mother interviewed	21.7	47.4	(1.8)	1.6	5.2	0.1	4.6	22.1	(1.1)	7,773
Mother not interviewed, but in household	22.5	44.4	(1.8)	2.1	5.4	0.2	5.2	14.4	(0.9)	196
Mother not interviewed, and not in household ⁵	29.1	53.9	(2.0)	0.9	4.2	0.1	3.8	24.2	(1.1)	551
Wealth quintile										
Lowest	29.2	53.9	(2.1)	2.2	6.1	(0.0)	7.1	28.4	(1.3)	1,680
Second	24.7	53.1	(2.0)	1.7	5.1	0.1	4.7	24.4	(1.1)	1,813
Middle	24.3	51.8	(1.9)	1.5	4.6	0.1	4.2	22.8	(1.1)	1,916
Fourth	18.5	44.4	(1.7)	1.3	5.0	0.0	4.0	20.1	(1.0)	1,732
Highest	12.2	32.0	(1.4)	1.5	4.9	0.1	2.4	12.6	(0.8)	1,380
Total	22.2	47.8	(1.8)	1.6	5.2	0.1	4.5	22.0	(1.1)	8,520

Note: Table is based on children who stayed in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the NCHS/CDC/WHO International Reference Population. The percentage of children who are more than three or more than two standard deviations below the median of the International Reference Population (-3 SD and -2 SD) are shown according to background characteristics. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. Figures in parentheses are based on 25-49 unweighted cases.

¹Includes children who are below -3 standard deviations (SD) from the International Reference Population median.

²Excludes children whose mothers were not interviewed

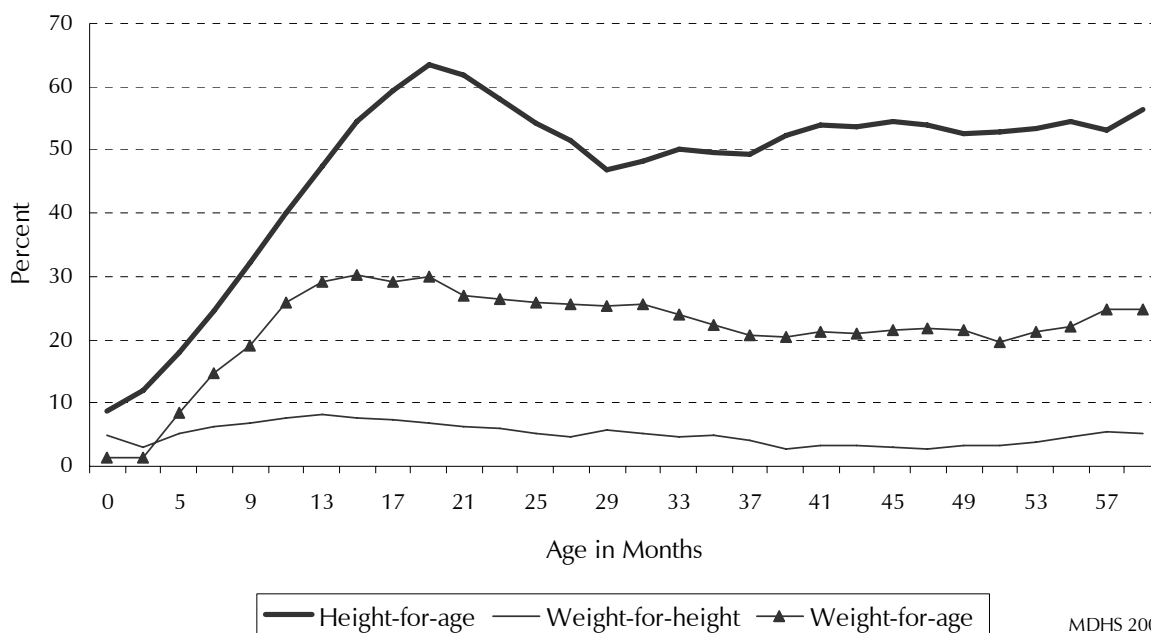
³First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

⁴For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the household schedule.

⁵Includes children whose mothers are deceased

Figure 10.2 shows the percentage of children under age five who are stunted, wasted, and underweight by age in months. Stunting is lowest among children under six months and peaks at age 18-19 months (63 percent). Wasting is highest at age 10-15 months (8 percent), after which it fluctuates between 3-6 percent. The extent of underweight is less than 10 percent among children under 6 months and is highest among children 12-10 months (30 percent).

Figure 10.2 Percentage of Children with Low Height-for-Age, Weight-for-Height, and Weight-for-Age, by Age of Child



MDHS 2004

10.6 NUTRITIONAL STATUS OF WOMEN

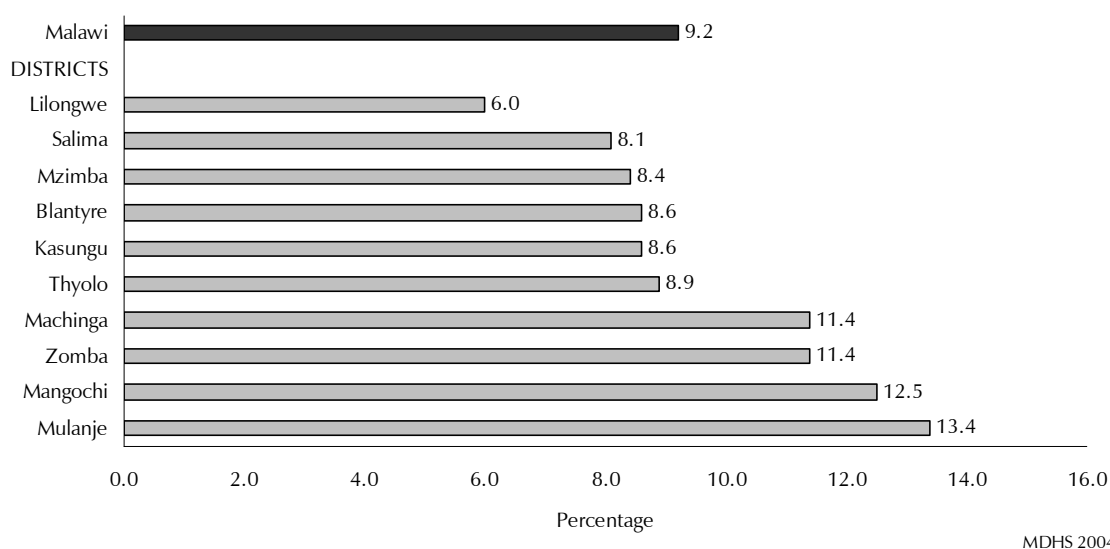
Data on height and weight of all women aged 15-49 were collected in the 2004 MDHS to assess the nutritional status of women. Two indices are used, namely height and body mass index (BMI) which combines the height and weight measures. A woman's height is related to socio-economic status and nutrition during childhood and adolescence. Maternal height is also used to predict the risk of difficult delivery; small stature is always associated with small pelvis size and the potential for obstructed labour (NSO and ORC Macro, 2001). The risk of low birth weight is also increased in short women. The optimal cutoff point, below which a woman is identified as at risk, is in the range of 140 to 150 centimetres.

The nutritional status of women in Malawi has remained constant since 2000; the mean height of mothers is 156 centimetres and 3 percent of women are less than 145 centimetres in height (Table 10.12). The table also shows that women's height varies little according to their background characteristics.

To assess thinness and obesity the report uses the body mass index, defined as the weight in kilograms divided by the squared height in metres. A lower cut off point of 18.5 is used to define chronic energy deficiency. The table shows that the mean BMI among the weighed and measured women is 22, with 77 percent of women classified as normal. Nine percent of women have a BMI below 18.5, signifying a nutritional deficit.

Table 10.12 shows that rural women are almost twice as likely to be thin as urban women. Women in the Southern Region and women in Mangochi and Mulanje are more likely to be thin compared with women in other districts (see Figure 10.3). Women in the highest wealth quintile, on the other hand, are the least likely to be thin compared with other women.

Figure 10.3 Prevalence of Chronic Energy Deficiency (Percentage with BMI <18.5) Among Women Age 15-49, for Selected Districts



The body mass index is also used to measure the percentage of women who are overweight or obese. Women are said to be overweight or obese if their BMI is 25 or higher. The 2004 MDHS indicates that 14 percent of women are overweight and 2 percent have a BMI of 30 or higher (severely overweight or obese). Women living in wealthier households are more likely to be overweight or obese. For example, 25 percent of women in the highest wealth quintile are overweight or obese compared with 8 percent of women in the lowest quintile. Urban women are also more likely to be overweight or obese than women in the rural areas (23 and 12 percent, respectively). There are large variations in BMI across districts. For overweight or obese women, the proportions range from 18 to 19 percent in Zomba and Blantyre to 7 percent in Machinga.

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11.1 INTRODUCTION

The 2004 Malawi Demographic and Health Survey (MDHS) collected information on HIV/AIDS as well as other sexually transmitted infections (STIs). AIDS, or acquired immune deficiency syndrome, is one of the most serious public health and development challenges to face sub-Saharan Africa. The total number of people infected with HIV is estimated to be between 700,000 and one million people in 2003. This figure includes 60,000–80,000 HIV-positive children under age 15. One-third of those infected live in urban areas and two-thirds in rural areas. AIDS-related deaths constitute personal, economic, and social tragedies in the lives of surviving family, friends, and employers.

The principal mode of HIV transmission in Malawi is heterosexual contact. This accounts for 90 percent of HIV infections in the country (UNAIDS/WHO, 2000). The duration between HIV infection and the onset of AIDS varies but averages 9–10 years, and death typically ensues within 1–2 years of symptom onset. This is followed in importance by perinatal transmission (9 percent of all HIV infections), when the mother passes HIV to the child during pregnancy, delivery or breastfeeding. It is estimated that approximately 20 percent of babies born to HIV-positive mothers will be infected around the time of birth. About one-half of children infected during the perinatal period will die before their fifth birthday.

The children of HIV-infected parents who are not themselves infected are still at a great disadvantage, due to the health and social consequences of possibly losing one or both parents to AIDS. It is estimated that between 1990 and 2003, the number of children under 18 who were living without one or both parents in Malawi grew from about 800,000 to 1.2 million (NAC, 2004b), with most of the increase being the result of sharp rises in the rates of adult mortality.

The future course of Malawi's AIDS epidemic depends on a number of important variables, including the level of public awareness about HIV/AIDS, the level and pattern of risk-related behaviours, access to high quality services for sexually transmitted infections (STIs), and provision of HIV testing and counselling. The impact of AIDS is now affecting all sectors of Malawian society, and the nation's response needs to be matched with multisectoral strategies and interventions. The National AIDS Commission (NAC) is on the leading edge of efforts to bring down barriers to effective HIV/AIDS programmes and has identified the key challenges and opportunities to galvanise an effective national effort (NAC, 2000).

This chapter presents data about the extent of relevant knowledge, perceptions, and behaviours at the national and sub-national levels, and for various socioeconomic subgroups of the population. This information is relevant for AIDS control programmes to be able to target groups of individuals most in need of information and service and most vulnerable to the risk of HIV infection.

The data obtained from the 2004 MDHS provide an excellent opportunity to assess the levels and trends of factors related to the HIV infection. These factors include current levels of knowledge on AIDS-related issues, experience with HIV testing, and knowledge of and experience with other sexually transmitted infections, which may be important cofactors in HIV transmission. Information on patterns of sexual activity and condom use, especially among young women and men are also discussed in this section. Finally, schooling status and living arrangements of orphaned children are also presented in this chapter.

11.2 KNOWLEDGE OF AIDS AND HIV TRANSMISSION

11.2.1 Awareness of AIDS

Table 11.1 shows the percentage of women and men who have heard of AIDS by their background characteristics. Knowledge of AIDS among women and men in Malawi is almost universal. This is true across age group, urban-rural residence, marital status, wealth index, and education.

11.2.2 Knowledge of Ways to Reduce AIDS Transmission

Table 11.2 presents the percentage of women and men who reported selected ways that people can do to reduce the risk of getting the AIDS virus. The specific ways are abstaining from sex, being faithful to one uninfected sexual partner, and using condoms. Overall, for women and men, abstaining from sex was mentioned most frequently (71 percent for women and 90 percent for men). The second most cited reason for avoiding AIDS infection is by limiting sex to one uninfected person (68 percent and 80 percent, respectively). Condom use is cited by 57 percent of women and 76 percent of men. The combination of using condoms and limiting sex to one uninfected partner is mentioned by 47 percent of women and 63 percent of men. Small variations are shown in the proportion by age, marital status, and residence.

Table 11.1 Knowledge of AIDS

Percentage of women and men age 15-49 who have heard of AIDS, by background characteristics, Malawi 2004

Background characteristic	Women		Men	
	Has heard of AIDS	Number of women	Has heard of AIDS	Number of men
Age				
15-19	98.5	2,392	98.4	650
20-24	98.3	2,870	100.0	587
25-29	98.6	2,157	99.6	634
30-39	98.8	2,595	99.8	779
40-49	98.9	1,684	100.0	464
15-24	98.4	5,262	99.2	1,237
Marital status				
Never married	98.8	1,970	99.0	1,084
Ever had sex	99.6	671	99.9	686
Never had sex	98.4	1,299	97.5	398
Married/living together	98.5	8,312	99.8	1,936
Divorced/separated/ widowed	99.0	1,416	100.0	93
Residence				
Urban	99.2	2,076	99.7	661
Rural	98.4	9,621	99.5	2,453
Region				
Northern	99.9	1,552	99.4	404
Central	97.3	4,734	99.2	1,302
Southern	99.3	5,412	99.8	1,408
District				
Blantyre	99.7	914	100.0	315
Kasungu	99.0	497	99.3	148
Machinga	99.5	427	100.0	106
Mangochi	97.1	599	99.6	141
Mzimba	99.8	778	99.3	203
Salima	97.7	303	100.0	72
Thyolo	99.6	618	100.0	156
Zomba	99.5	637	100.0	155
Lilongwe	96.2	1,705	99.3	523
Mulanje	99.4	512	100.0	105
Other districts	98.8	4,708	99.3	1,189
Education				
No education	97.3	2,734	99.2	350
Primary 1-4	97.7	2,998	98.3	746
Primary 5-8	99.6	4,154	100.0	1,171
Secondary+	99.8	1,811	100.0	845
Wealth quintile				
Lowest	97.4	2,037	98.6	383
Second	98.0	2,277	99.5	614
Middle	98.7	2,383	99.4	666
Fourth	99.4	2,361	99.8	666
Highest	99.3	2,639	99.8	785
Total 15-49	98.6	11,698	99.5	3,114
Total men 15-54	na	na	99.5	3,261

na = Not applicable

There is a strong association between the respondent's educational level and knowledge of AIDS prevention. For example, the percentage of women who mention abstaining from sex increases from 63 percent for women with no education to 79 percent for women with secondary or higher education. In all subgroups of men, the percentage who mention abstaining from sex is high (83 percent or higher). Knowledge of all three means of HIV transmission tends to increase with wealth.

11.2.3 Beliefs about AIDS

More than two decades since the first cases of AIDS were reported in Malawi, many people still do not know how the disease is transmitted. The 2004 MDHS asked questions to find out whether people have misconceptions about HIV/AIDS. The questions included in the survey are: whether a healthy-looking person can have AIDS virus, whether a mosquito can transmit AIDS, whether AIDS can be transmitted by supernatural powers, and whether a person can be infected by AIDS by sharing food with a person who has the AIDS virus.

Table 11.3.1 shows that four in five women correctly say that a healthy-looking person can have the AIDS virus and that a person cannot become infected by sharing a meal with a person who has the AIDS virus. Three in four women report that AIDS cannot be transmitted by supernatural powers, while two in three women say that AIDS cannot be transmitted by mosquitoes. Overall, less than half of women can identify the two most common misconceptions and know that a healthy-looking person can have the AIDS virus.

Table 11.3.1 also shows that the pattern among women 15-24 is similar to that for all women. Beliefs about AIDS do not vary much by marital status. The percentage of women who correctly identify two misconceptions and say that a healthy-looking person can have the AIDS virus ranges from 47 percent among women who are currently married to 63 percent among women who have never married but have had sex.

Beliefs about AIDS vary by residence; urban women are more knowledgeable about AIDS than rural women. While 88 percent of urban women say that a healthy-looking person can have the AIDS virus, the proportion for rural women is 81 percent. Further, whereas 64 percent of women in urban areas can identify two misconceptions and confirm that a healthy-looking person can have AIDS virus, the corresponding proportion for rural women is 45 percent.

There is a strong association between a respondent's education and wealth status and her beliefs about AIDS. For example, 93 percent of women with secondary or higher education say that a healthy-looking person can have AIDS virus, compared with 73 percent of women with no education. While two in three women in the highest wealth quintile identify the two most common misconceptions and say that a healthy-looking person can have the AIDS virus, only 38 percent of women in the lowest quintile share this belief.

There are no significant regional differences in the level of comprehensive correct knowledge of HIV/AIDS prevention and transmission. However, there are differentials in misconceptions levels by districts, comprehensive knowledge about HIV/AIDS among women ranges from 13 percent in Kasungu and 15 percent in Mangochi to 33 percent in Mulanje.

Table 11.3.2 shows information on beliefs about AIDS among men. In general, the proportions for men are higher than those for women, which suggests that men are more knowledgeable than women in matters related to AIDS. Whereas slightly less than half of women can identify two of the most common misconceptions and say that a healthy-looking person can have the AIDS virus, the corresponding proportion for men is 60 percent.

Overall, 92 percent of men are aware that a healthy-looking person can have the AIDS virus and 91 percent say that a person can not become infected by sharing a meal with a person who has AIDS. Individual beliefs about AIDS vary little across subgroups of men. However, the likelihood that a man identifies two misconceptions and agrees that a healthy-looking person can have the AIDS virus varies by residence and increases with education and wealth status. While 43 percent of men with no education agree with these statements, the corresponding proportion for men with secondary or higher education is 80 percent.

The majority of respondents do not have comprehensive knowledge of HIV/AIDS transmission and prevention methods: 22 percent of women and 39 percent of men know about condom use and limiting sex to one uninfected partner as HIV prevention methods, are aware that a healthy-looking person can have the AIDS virus, and reject the two most common local misconceptions, i.e., HIV can be transmitted through mosquito bites and through supernatural means. Education is positively correlated with the likelihood of having comprehensive knowledge about HIV/AIDS. The youngest and oldest respondents have the lowest levels of comprehensive knowledge. There is room for growth in educating the population about the modes of transmission of the AIDS virus, especially in the rural areas, where levels of knowledge are lower.

There are no significant variations in the level of correct knowledge of HIV/AIDS prevention and transmission among men. The proportion of men with comprehensive knowledge ranges from 30 percent in Mzimba to 50 percent in Machinga.

11.2.4 Knowledge of Mother-to-Child Transmission

The 2004 MDHS collected information as to whether women and men who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of maternal to child transmission (MTCT) of HIV can be reduced by the mother taking special drugs during pregnancy. Table 11.4 shows the results. Overall, three in four women agree that HIV can be transmitted by breastfeeding, while 39 percent said the risk of MTCT can be reduced by the mother taking drugs during pregnancy and 37 percent reported both, that HIV can be transmitted by breastfeeding and the risk of MTCT can be reduced by the mother taking special drugs during pregnancy.

Knowledge of MTCT through breastfeeding varies by the women's marital status, ranging from 77 percent for ever-married women to 58 percent for women who have never had sex. Urban women, more educated women, and women in higher wealth quintiles are more knowledgeable about MTCT than other women.

Overall, almost seven in ten men say that HIV can be transmitted by breastfeeding, 35 percent say that the risk of MTCT can be reduced by the mother taking drugs during pregnancy, and 29 percent report that HIV can be transmitted by breastfeeding and that the risk of MTCT can be reduced by taking special drugs during pregnancy.

Knowledge of HIV transmission from mother to child among men varies. In general, better educated men and men in the higher wealth quintiles are more likely to know ways to prevent the risk of babies contracting HIV from their mothers. Regional differentials show that men in the Northern Region are more likely than men in other regions to know that HIV can be transmitted by breastfeeding, but less likely to say that drugs can be taken during pregnancy to reduce the risk of transmission. Predictably, knowledge of MTCT transmission is lower among men than among women (29 percent compared with 37 percent).

11.3 ACCEPTING ATTITUDES TOWARDS THOSE WITH HIV/AIDS

In the 2004 MDHS, to gauge stigma associated with AIDS, respondents who had heard of HIV/AIDS were asked questions about their attitudes towards people with HIV. These questions include whether respondents would be willing to take care of orphaned children of family member who died of HIV, whether they would buy fresh vegetables from shopkeepers who have HIV, and whether they believe an HIV-positive female teacher should be allowed to keep on teaching. Almost all women (94 percent) say that they are willing to take care of orphaned children of a family member who died of HIV. About two in three women said they would buy fresh vegetables from a shopkeeper who has HIV, that an HIV-positive teacher should be allowed to keep teaching and that they would not necessarily fear disclosure of a family member's HIV-positive status. When taking into account all of the stigmas toward persons with AIDS, about one in three women express their acceptance of all four measures.

The attitudes of women toward persons infected with HIV do not vary much across subgroups, except that urban women appear to be more accepting of an HIV infected female teacher continuing to work than rural women (80 percent compared with 64 percent). There is a strong positive correlation between the level of accepting attitudes and the woman's education with one exception; women with more education are less likely than others to not care that the HIV status of a family member remains a secret.

Table 11.5.1 also shows that urban women are as willing as rural women to take care of orphaned children of a family member who died of AIDS (94 percent). In general, women in the Southern Region, better educated women, and women in higher wealth quintiles are less likely than other women to have a stigma towards persons with AIDS. For instance, while 26 percent of women in the lowest wealth quintile have accepting attitudes on all four measures of stigma, the corresponding proportion for women in the highest wealth quintile is 36 percent. There are variations in attitudes towards persons living with AIDS across districts, women in Machinga have the least accepting attitudes (20 percent) and women in Thyolo have the most accepting attitudes (41 percent).

In the 2004 MDHS, the same questions were asked to men who heard of HIV/AIDS. The findings are presented in Table 11.5.2. The table shows that 97 percent of men age 15-49 are willing to take care of orphaned children of a relative who died of HIV, 84 percent would buy fresh vegetables from a shopkeeper who has HIV, 80 percent believed that an HIV-positive female teacher should be allowed to keep on teaching, and 48 percent say that they would not want the HIV status of family to remain secret. Differentials in stigma towards persons with AIDS among men are less pronounced and than among women, and do not show a particular pattern.

Table 11.5.1 Accepting attitudes towards people living with HIV: women

Among women age 15-49 who have heard of AIDS, percentage expressing specific positive attitudes towards people with HIV, by background characteristics, Malawi 2004

Background characteristic	Percentage of women who:				Percentage expressing acceptance on all four measures	Number of women who have heard of HIV/AIDS
	Would be willing to take orphaned children of relative who died of AIDS	Would buy fresh vegetables from vendor who has the AIDS virus	Believe a female teacher who has the AIDS virus should be allowed to continue teaching	Would not fear disclosing status of family member who became infected with AIDS virus		
Age						
15-19	91.6	63.0	62.0	67.9	28.6	2,356
20-24	94.3	69.6	70.9	63.6	33.2	2,821
25-29	94.6	66.9	68.5	63.2	30.8	2,127
30-39	95.0	67.6	66.7	63.8	30.7	2,563
40-49	94.3	65.0	63.3	65.8	30.2	1,665
Marital status						
Never married	91.2	66.7	66.5	63.5	28.8	1,946
Ever had sex	91.4	74.4	74.3	66.2	35.3	668
Never had sex	91.0	62.7	62.4	62.1	25.4	1,278
Married/living together	94.4	66.8	66.6	64.7	31.1	8,185
Divorced/separated/widowed	95.1	65.3	67.0	67.0	32.1	1,402
Residence						
Urban	93.8	76.5	80.0	57.6	34.3	2,060
Rural	94.0	64.5	63.7	66.3	30.1	9,471
Region						
Northern	92.2	66.0	67.3	62.5	29.6	1,551
Central	91.9	65.9	58.4	61.4	24.9	4,605
Southern	96.3	67.5	73.5	68.3	36.2	5,375
District						
Blantyre	97.4	78.7	82.6	59.5	37.8	912
Kasungu	92.7	63.6	54.3	59.1	22.5	492
Machinga	95.5	50.0	58.9	54.0	20.1	425
Mangochi	91.7	55.3	65.2	65.0	25.2	582
Mzimba	94.4	70.4	68.8	62.2	31.8	777
Salima	92.7	61.0	65.6	61.3	23.5	296
Thyolo	98.3	73.1	71.5	74.7	41.2	615
Zomba	95.6	71.8	78.3	59.9	34.7	634
Lilongwe	89.9	70.1	60.4	52.3	21.5	1,640
Mulanje	97.4	66.1	72.4	76.4	40.3	509
Other districts	93.9	64.6	64.7	70.5	32.7	4,650
Education						
No education	91.7	54.4	55.4	70.7	25.5	2,659
Primary 1-4	93.3	57.8	58.5	68.6	26.3	2,928
Primary 5-8	94.5	71.9	70.5	63.9	34.3	4,137
Secondary+	97.1	87.0	87.4	51.7	38.2	1,807
Wealth quintile						
Lowest	93.6	56.7	55.0	69.7	25.7	1,983
Second	93.0	58.3	60.2	69.4	27.5	2,231
Middle	93.5	63.4	63.0	65.7	28.9	2,352
Fourth	94.2	69.6	69.4	64.3	34.0	2,345
Highest	95.2	81.5	81.6	56.7	36.4	2,620
Total	94.0	66.6	66.6	64.8	30.8	11,532

Note: Some of these questions differ from the standard questions on stigma related to HIV/AIDS

Table 11.5.2 Accepting attitudes towards people living with HIV: men

Among men age 15-49 who have heard of AIDS, percentage expressing specific positive attitudes towards people with HIV, by background characteristics, Malawi 2004

Background characteristic	Percentage of men who:				Percentage expressing acceptance on all four measures	Number of men who have heard of HIV/AIDS
	Would be willing to take orphaned children of relative who died of AIDS	Would buy fresh vegetables from vendor who has the AIDS virus	Believe a female teacher who has the AIDS virus should be allowed to continue teaching	Would not fear disclosing status of family member who became infected with AIDS virus		
Age						
15-19	95.3	77.7	70.9	54.0	29.2	639
20-24	96.7	87.2	77.1	47.5	28.2	587
25-29	96.7	86.2	83.8	45.1	29.5	631
30-39	97.5	83.6	83.7	44.5	30.4	777
40-49	97.4	85.4	81.1	48.0	32.5	464
Marital status						
Never married	95.2	82.0	76.2	49.5	28.3	1,073
Ever had sex	95.9	83.3	77.1	51.1	29.7	685
Never had sex	94.1	79.7	74.5	46.6	25.9	388
Married/living together	97.5	85.0	81.5	47.0	31.1	1,932
Divorced/separated/widowed	97.2	82.3	75.3	41.5	22.0	93
Residence						
Urban	95.2	89.9	89.4	39.5	27.6	659
Rural	97.1	82.2	76.8	49.9	30.5	2,439
Region						
Northern	96.0	82.3	71.7	44.1	27.2	401
Central	97.2	83.3	74.3	44.4	24.9	1,292
Southern	96.4	84.8	86.4	51.7	35.2	1,405
District						
Blantyre	94.0	94.1	90.3	50.5	37.7	315
Kasungu	97.4	78.9	67.9	34.6	19.6	147
Machinga	97.7	83.9	91.1	49.8	38.1	106
Mangochi	95.9	71.2	74.2	37.3	18.0	141
Mzimba	97.0	83.2	72.5	40.0	26.3	202
Salima	93.9	83.1	69.4	38.3	18.2	72
Thyolo	99.2	83.3	86.8	57.2	41.5	156
Zomba	95.5	86.7	83.1	42.0	25.5	155
Lilongwe	97.0	86.1	81.8	43.0	26.8	519
Mulanje	94.8	83.2	86.0	57.5	35.6	105
Other districts	97.4	82.2	76.4	52.1	31.0	1,181
Education						
No education	96.4	70.2	69.5	60.5	32.4	347
Primary 1-4	96.1	72.6	68.6	56.3	26.7	734
Primary 5-8	96.9	87.0	79.7	46.3	31.6	1,171
Secondary+	97.1	94.9	92.8	36.7	29.1	845
Wealth quintile						
Lowest	96.8	78.7	70.4	53.5	28.4	377
Second	97.0	77.6	74.1	50.2	26.0	611
Middle	97.4	81.7	77.2	48.8	31.2	662
Fourth	97.8	87.8	81.3	45.9	30.8	665
Highest	95.0	89.8	88.3	43.4	31.7	783
Total 15-49	96.7	83.9	79.5	47.7	29.9	3,098
Total 15-54	96.7	83.3	79.4	47.5	29.7	3,246

Note: Some of these questions differ from the standard questions on stigma related to HIV/AIDS

11.4 ATTITUDES TOWARDS CONDOM EDUCATION FOR YOUTH

AIDS transmission can be reduced by using condoms. Table 11.6 shows the level of adult support for educating children age 12-14 in condom use to prevent AIDS. In the 2004 MDHS, women and men were asked whether they agree that children age 12-14 years should be taught about using condoms to avoid getting the AIDS virus. Half of the women and 56 percent of men age 18-49 agree that children in that age group should be taught about condom use in order to prevent contracting HIV/AIDS.

Background characteristic	Women		Men	
	Percent	Number	Percent	Number
Age				
18-19	52.3	1,054	62.5	283
20-24	54.1	2,870	57.3	587
25-29	50.8	2,157	56.6	634
30-39	47.8	2,595	55.4	779
40-49	42.5	1,684	50.7	464
Marital status				
Never married	50.4	863	57.8	720
Ever had sex	54.0	459	61.1	542
Never had sex	46.3	404	47.6	179
Married/living together	50.3	8,104	55.1	1,935
Divorced/separated/widowed	46.5	1,393	61.7	91
Residence				
Urban	53.3	1,830	56.1	585
Rural	49.0	8,530	56.0	2,162
Region				
Northern	45.6	1,341	49.7	352
Central	47.4	4,174	58.9	1,161
Southern	53.0	4,845	55.0	1,235
District				
Blantyre	59.7	829	57.1	293
Kasungu	45.5	435	50.4	129
Machinga	50.6	378	41.6	89
Mangochi	49.2	548	51.0	129
Mzimba	49.0	684	46.3	179
Salima	44.9	276	52.4	66
Thyolo	57.2	545	67.9	139
Zomba	46.7	566	58.6	133
Lilongwe	44.8	1,507	63.8	467
Mulanje	60.4	454	67.0	90
Other districts	48.8	4,139	53.7	1,033
Education				
No education	42.3	2,679	52.1	337
Primary 1-4	48.7	2,673	52.5	631
Primary 5-8	53.5	3,428	57.0	979
Secondary+	56.3	1,579	59.2	799
Wealth quintile				
Lowest	45.0	1,830	56.8	329
Second	47.4	2,069	53.6	541
Middle	49.8	2,132	56.8	604
Fourth	51.4	2,062	55.5	590
Highest	54.4	2,266	57.2	683
Total 18-49	49.8	10,360	56.0	2,747
Total men 18-54	na	na	55.5	2,895

na = Not applicable

husband has an STI. Women are less likely than men to say that a wife can refuse having sex with her husband if the husband has an STI (74 percent compared with 81 percent). However, women are as likely as men to say that a wife can propose to her husband to use a condom (81 percent and 80 percent, respectively). Overall, 81 percent of women say that a wife is justified to propose condom use if her husband has an STI and nine in ten women agree with both, refusing to have sex and proposing condom use. The corresponding proportion for men is 93 percent.

Wide variations exist across population groups, with older respondents, those living in urban areas, those with more education, and those in higher wealth quintiles are more likely to agree with women's ability to negotiate safer sex.

11.6 MULTIPLE SEXUAL PARTNERSHIPS

In the context of HIV/AIDS/STI prevention, limiting the number of sexual partners and having protected sex are crucial to the fight against the epidemic. Table 11.8 shows the percentage of women and men who had sexual intercourse with more than one partner in the last 12 months. Men in general are more likely to have more sexual partners than women. While only one percent of women had two or more sexual partners in the past year, the corresponding proportion for men is 11 percent.

Teenagers are more likely than older women to have two or more partners (2 percent compared with 1 percent or less for older women). Married women are the least likely to have multiple partners (less than 1 percent) compared with never married women (5 percent) or formerly married women (2 percent). Differentials across subgroups of women are not substantial.

Data for men show that men's behaviour with respect to having sex with multiple partners does not vary much across background characteristics. The only exception is that men in the Northern Region are twice as likely as men in the Southern Region (19 percent and 10 percent, respectively) to have multiple sex partners.

Table 11.8 Multiple sex partners among women and men

Among women and men age 15-49 who had sexual intercourse in the past 12 months, the percentage who had intercourse with more than one partner and among women and men who have ever had sex, the mean number of sexual partners in the past 12 months, by background characteristics, Malawi 2004

Background characteristic	Women				Men			
	Percentage who had 2+ partners in the past 12 months	Number of women who had sex in the past 12 months	Mean number of sexual partners in the past 12 months	Number of women who ever had sex	Percentage who had 2+ partners in the past 12 months	Number of men who had sex in the past 12 months	Mean number of sexual partners in the past 12 months	Number of men who ever had sex
Age								
15-19	2.2	1,095	0.9	1,249	14.4	223	0.8	340
20-24	1.4	2,499	0.9	2,741	12.6	435	1.1	521
25-29	0.9	1,940	0.9	2,126	11.5	564	1.0	615
30-39	0.7	2,241	0.9	2,594	10.9	738	1.1	776
40-49	0.4	1,312	0.8	1,684	11.7	442	1.1	460
15-24	1.7	3,594	0.9	3,991	13.2	658	1.0	861
Marital status								
Never married	6.3	434	0.7	670	15.5	451	0.9	686
Married/living together	0.6	8,004	1.0	8,309	10.8	1,893	1.1	1,933
Divorced/separated/widowed	3.2	649	0.5	1,416	16.9	57	0.8	93
Residence								
Urban	1.6	1,534	0.9	1,766	9.7	486	1.0	552
Rural	1.0	7,553	0.9	8,628	12.4	1,915	1.0	2,159
Region								
Northern	1.1	1,068	0.8	1,316	19.4	273	1.0	329
Central	0.9	3,635	0.9	4,090	12.4	990	1.0	1,113
Southern	1.2	4,383	0.9	4,989	9.5	1,138	1.0	1,269
District								
Blantyre	1.5	741	0.9	830	4.7	254	0.9	284
Kasungu	0.3	403	0.9	438	13.5	116	1.0	130
Machinga	0.6	355	0.9	396	9.8	89	1.1	93
Mangochi	1.1	468	0.8	563	16.1	122	1.1	135
Mzimba	0.9	532	0.8	661	15.4	135	0.9	168
Salima	1.2	242	0.9	272	18.4	63	1.2	66
Thyolo	0.4	533	0.9	578	11.1	126	1.0	140
Zomba	1.2	518	0.9	584	13.1	130	1.0	144
Lilongwe	1.3	1,304	0.9	1,454	12.2	386	1.0	438
Mulanje	3.2	416	0.9	479	14.3	85	1.0	97
Other districts	0.9	3,574	0.9	4,141	11.7	895	1.1	1,016
Education								
No education	0.8	2,338	0.9	2,694	7.5	318	1.0	340
Primary 1-4	1.1	2,467	0.9	2,744	12.0	594	1.0	651
Primary 5-8	1.2	3,092	0.9	3,539	13.5	881	1.1	988
Secondary+	1.1	1,189	0.8	1,417	11.4	606	1.0	732
Wealth quintile								
Lowest	1.6	1,525	0.8	1,864	10.4	301	1.0	342
Second	0.8	1,880	0.9	2,102	11.2	485	1.0	538
Middle	0.7	1,949	0.9	2,157	13.0	544	1.0	603
Fourth	1.1	1,852	0.9	2,068	13.2	513	1.1	584
Highest	1.3	1,880	0.9	2,204	10.7	558	1.0	645
Total 15-49	1.1	9,087	0.9	10,395	11.8	2,401	1.0	2,712

11.7 HIGHER-RISK SEX

Table 11.9 shows the percentage of sexually active women and men who had higher-risk sex (i.e., sex with a partner other than their husband or cohabiting partner) and the extent of condom

Table 11.9 Higher-risk sex and condom use at last higher-risk sex in the past year								
Among women and men reporting sexual activity in the 12 months preceding the survey, percentage who had sex with a nonmarital, noncohabiting partner in the past 12 months and among women and men who had higher-risk sex ¹ in the past 12 months, percentage who say they used a condom the last time they had sex with a nonmarital, noncohabiting partner, by background characteristics, Malawi 2004								
Background characteristic	Women				Men			
	Percentage who had higher-risk sex ¹ in the past 12 months	Number of women sexually active in the past 12 months	Percentage who used condom at last higher-risk sex	Number of women who had higher-risk sex in past 12 months	Percentage who had higher-risk sex ¹ in the past 12 months	Number of men sexually active in the past 12 months	Percentage who used condom at last higher-risk sex	Number of men who had higher-risk sex in past 12 months
Age								
15-19	27.5	1,095	34.9	302	94.8	223	35.8	211
20-24	7.9	2,499	35.6	197	45.4	435	58.5	198
25-29	5.4	1,940	26.9	105	20.7	564	55.9	117
30-39	4.8	2,241	17.9	107	13.1	739	41.7	97
40-49	3.3	1,312	9.7	44	5.4	442	(31.0)	24
Marital status								
Never married	99.0	434	37.5	430	98.6	451	47.9	444
Married/living together	0.8	8,004	24.7	67	8.3	1,894	46.9	156
Divorced/separated/widowed	39.8	649	19.2	258	77.9	57	39.5	45
Residence								
Urban	13.8	1,534	43.7	211	35.0	486	57.2	170
Rural	7.2	7,553	24.8	544	24.8	1,916	43.5	475
Region								
Northern	7.0	1,068	43.1	75	27.2	273	55.3	74
Central	6.2	3,635	39.0	224	24.6	990	50.7	244
Southern	10.4	4,383	23.6	456	28.7	1,139	42.5	328
District								
Blantyre	13.6	741	31.6	101	25.6	254	(58.1)	65
Kasungu	2.8	403	*	11	23.9	116	47.9	28
Machinga	7.4	355	(19.0)	26	37.4	89	25.5	33
Mangochi	8.5	468	21.5	40	33.8	122	31.0	41
Mzimba	5.1	532	(45.7)	27	21.0	135	(62.1)	28
Salima	4.8	242	(46.6)	12	22.7	63	(47.6)	14
Thyolo	13.1	533	16.2	70	22.5	128	(53.5)	29
Zomba	12.5	518	21.2	65	32.3	130	30.7	42
Lilongwe	7.2	1,304	(43.5)	94	28.7	386	51.8	111
Mulanje	12.9	416	15.6	54	28.1	85	(25.2)	24
Other districts	7.2	3,574	32.4	256	25.8	895	50.2	230
Education								
No education	4.1	2,338	9.9	97	14.5	318	(22.1)	46
Primary 1-4	6.1	2,467	18.7	151	24.9	596	39.4	148
Primary 5-8	8.8	3,092	30.1	273	25.9	881	40.5	228
Secondary+	19.7	1,189	45.8	234	36.7	606	64.2	223
Wealth quintile								
Lowest	10.7	1,525	17.2	163	24.8	301	41.6	75
Second	5.1	1,880	16.6	96	24.1	485	43.3	117
Middle	6.1	1,949	27.1	119	21.1	544	37.8	115
Fourth	5.9	1,852	29.5	110	26.3	515	46.5	135
Highest	14.2	1,880	44.4	267	36.6	558	56.9	204
Total 15-49	8.3	9,087	30.1	755	26.9	2,402	47.1	646
Total men 15-54	na	na	na	na	25.7	2,545	47.1	653

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
¹Sexual intercourse with a partner who is neither a spouse nor a person who lives with the respondent
na = Not applicable

use the last time they had sex with such a partner. Women are much less likely to engage in higher risk sex than men (8 percent compared with 27 percent of those who had sex in the 12 months before the survey). Both younger women and men age 15-19 are substantially more likely to have higher-risk sex than older respondents, mainly because they are less likely to be married. While almost all sexually active men age 15-19 had sex with a noncohabiting partner (95 percent), only 5 percent of men age 40-49 engaged in higher-risk sex.

Condom use for higher-risk sex is reported by 30 percent of women and 47 percent of men. Women and men in urban areas are more likely to use condoms than their rural counterparts. For women, the percentage who used condoms at the last higher-risk sex in urban areas is 44 percent compared with 25 percent in rural areas. Predictably, the respondent's education and wealth status are positively correlated with condom use.

11.8 PAID SEX AND CONDOM USE

Male respondents in the 2004 MDHS were asked whether they had paid money in exchange for sex in the 12 months preceding the survey. Among men age 15-49, 5 percent reported paying for sex in the last 12 months, 43 percent of whom reported that they used condoms at the most recent paid sex (Table 11.10). Younger men are slightly more likely than older men to have sex with prostitutes (8 percent among men 15-19 compared with 6 percent or less for older men). Married men are less likely than never-married men and divorced, separated or widowed men to have sex with

Table 11.10 Paid sex in past year and condom use at last paid sex

Percentage of men reporting sex with a prostitute in the past 12 months, and among these men percentage reporting condom use the last time they had sex with a prostitute, by background characteristics, Malawi 2004

Background characteristic	Percentage reporting sex with prostitute in past 12 months	Number of men	Percentage reporting condom use at last sex with prostitute	Number of men reporting sex with prostitute in past 12 months
Age				
15-19	8.2	650	30.3	53
20-24	5.8	587	(40.6)	34
25-29	3.8	634	(56.7)	24
30-39	4.5	779	53.8	35
40-49	1.7	464	*	8
15-24	7.1	1,237	34.3	87
Marital status				
Never married	7.4	1,084	33.6	80
Ever had sex	11.6	686	33.6	80
Never had sex	0.0	398	*	0
Married/ living together	3.4	1,936	52.3	66
Divorced/ separated/widowed	9.4	93	*	9
Residence				
Urban	3.1	661	*	20
Rural	5.5	2,453	41.4	134
Region				
Northern	2.3	404	*	9
Central	4.2	1,302	50.2	54
Southern	6.5	1,408	34.9	91
Education				
No education	5.9	350	*	21
Primary 1-4	6.2	746	(28.4)	47
Primary 5-8	5.3	1,171	41.9	62
Secondary+	3.0	845	(83.2)	25
Wealth quintile				
Lowest	4.0	383	*	15
Second	7.0	614	(26.7)	43
Middle	4.9	666	(41.5)	33
Fourth	5.8	666	(52.8)	39
Highest	3.1	785	(59.1)	25
Total 15-49	5.0	3,114	42.4	155
Total 15-54	4.8	3,261	42.5	156

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

a prostitute (3 percent compared with 12 and 9 percent, respectively). Paid sex is more common among men in the rural areas, in the Southern Region, and those with less education. The relationship between payment for sex and wealth quintile is less clear.

Due to the small number of men who report using condoms at last sex with a prostitute, the results have to be used with caution. While young men are more likely than older men to report having sex with a prostitute, they are less likely to use condoms. Also, while married men are less likely than men who are not in a union to have sex with a prostitute, they are more likely than other men to use condoms.

11.9 COUNSELLING AND TESTING FOR HIV

Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce the risk of contracting the disease and to increase safer sex practices so they can remain disease free. For those who are HIV infected, knowledge of their status allows them to better protect their sexual partners, to access treatment, and to plan for their future.

In order to gauge the coverage of HIV testing as well as the unmet need for testing, respondents in the 2004 MDHS were asked if they had ever been tested to see if they have the AIDS virus. Those who had been tested were asked when they were last tested, whether they had asked for the test or were required to take it, and whether they received their results. Those who had not been tested were asked if they would like to be tested and whether they know of a place to go for an AIDS test.

Table 11.11 shows the percentage of women and men who have ever been tested and those who were tested and received the test results in the 12 months preceding the survey, by background characteristics. Overall, 83 percent of women and 83 percent of men have never been tested. Table 11.11 further shows that 13 percent of women and 15 percent of men were tested and received the results, while 2 percent report that they did not receive the test results. The table also shows that 4 percent of women and 8 percent of men were tested and received the test results in the 12 months preceding the survey.

example, 25 percent of women with secondary or higher education were ever tested and received the test result, compared with 8 percent of women with no education.

Among the oversampled districts, while 29 percent of women in Thyolo were tested and received the results, in Kasungu, Machinga, Mangochi, Salima, and Mulanje this proportion is less than 10 percent. For men, coverage of testing and receiving results ranges from and 6 percent in Machinga to 23 percent in Thyolo.

In the 2004 MDHS, women who had a live birth in the five years preceding the survey were asked whether they received information about HIV/AIDS and whether they were asked to give blood for HIV testing during an antenatal visit for the most recent birth. They were also asked whether they received the test result. Table 11.12 shows the findings for women who gave birth in the two years preceding the survey. Overall, 53 percent of women were counselled about HIV during an antenatal care visit, 4 percent were tested for HIV, and most of them received the result. Counselling and testing are more often reported by urban women. In general, coverage of counselling and testing increases with the woman's education level and wealth status. Women in the Central Region are less likely than women in other regions to report counselling. However, they are as likely to be tested for HIV.

Table 11.12 also shows that 3 percent of women who gave birth in the two years preceding the survey were counselled about HIV, tested for HIV, and received the HIV test result. While there are small age differentials, women in the urban areas are four times more likely than rural women to receive the full service on HIV during antenatal care (8 percent compared with 2 percent). Wide variations are found across districts, with women in Blantyre and Thyolo being the most likely to receive counselling about HIV and being tested for HIV (6 and 8 percent, respectively).

As mentioned above, 83 percent of women and men have never been tested for HIV. Table 11.13 shows that most of the respondents who have never been tested say that they know where to go for a test for the AIDS virus (79 percent of women age 15-49 and 85 percent of men age 15-49). Of those who know a place to have a test for HIV, about half mention a government-run hospital or clinic (47 percent of women and 40 percent of men). The next most often cited place for HIV testing is Malawi AIDS Counselling and Resource Organisation (MACRO), mentioned by 12 percent of women and 23 percent of men. Mission health facilities are mentioned by 12 percent of women and 8 percent of men. Another testing place frequently cited is Banja La Mtsogolo (BLM) clinics (6 percent of women and 9 percent of men).

Table 11.12 Pregnant women counselled and tested for HIV

Among women who gave birth in the two years preceding the survey, percentage who were counselled and offered HIV testing during antenatal care for their most recent birth, accepted an offer of testing and received test results, by background characteristics, Malawi 2004

Background characteristic	Counselled during antenatal visit	Voluntarily tested for HIV during antenatal care visit		Counselled, tested for HIV, and received results	Number of women who gave birth in the past 2 years
		Received results	Results not received		
Age					
15-19	45.1	2.8	0.9	2.3	534
20-24	50.5	3.8	0.5	3.3	1,641
25-29	53.3	3.6	0.9	2.9	1,109
30-39	56.2	4.2	0.2	3.4	1,079
40-49	62.1	3.7	0.2	3.4	241
15-24	49.2	3.6	0.6	3.1	2,175
Residence					
Urban	67.7	8.7	0.9	8.0	583
Rural	50.3	3.0	0.5	2.4	4,021
Region					
Northern	56.3	4.3	0.5	3.5	559
Central	43.6	3.6	0.4	3.0	1,931
Southern	59.6	3.7	0.7	3.2	2,115
District					
Blantyre	64.7	6.2	0.8	6.2	303
Kasungu	39.5	1.2	0.7	0.7	226
Machinga	52.3	1.0	0.8	1.0	191
Mangochi	52.5	2.0	1.2	1.4	274
Mzimba	56.7	3.4	0.2	2.7	289
Salima	44.8	0.0	0.5	0.0	138
Thyolo	74.4	8.9	0.8	8.4	240
Zomba	63.1	2.1	0.5	1.4	239
Lilongwe	51.3	6.8	0.0	5.5	627
Mulanje	66.5	0.9	0.6	0.6	178
Other districts	47.0	3.3	0.6	2.7	1,900
Education					
No education	42.2	2.7	1.1	2.4	1,153
Primary 1-4	48.7	2.8	0.4	1.9	1,354
Primary 5-8	59.1	3.8	0.5	3.2	1,561
Secondary+	64.9	8.1	0.1	7.7	534
Wealth quintile					
Lowest	47.6	2.6	0.6	2.1	919
Second	47.0	2.3	0.7	1.6	1,111
Middle	53.1	3.8	0.4	3.2	1,001
Fourth	52.0	2.7	0.5	2.5	871
Highest	67.5	8.5	0.6	7.7	701
Total	52.5	3.7	0.6	3.1	4,604

The proportion of women and men who cited a public hospital as a source of test is lower among those who live in the urban areas than in rural areas. However, reporting of other sites such as MACRO is much higher among urban respondents and those with higher education. It is interesting that for women, knowledge of BLM as a test site increases with education, while men show the reverse pattern. Men with no education are more likely to mention BLM than educated men.

11.10 SELF-REPORTING OF SEXUALLY TRANSMITTED INFECTIONS AND SYMPTOMS

The 2004 MDHS collected information from female and male respondents about their knowledge of sexually transmitted infections other than HIV. Respondents who had ever had sex were further asked whether they have had a sexually transmitted infection (STI) in the 12 months preceding the survey or if they had either one of the symptoms of STI; abnormal genital discharge or a genital sore or ulcer.

Table 11.14 shows that only 1 percent of women and 1 percent of men report having an STI. Abnormal genital discharge is reported by 3 percent of women and 3 percent of men, while 6 percent of women and 3 percent of men say that they had a genital sore or ulcer. Women are more likely than men to report having an STI or symptoms associated with STI (8 percent compared with 6 percent). Small differences are observed across subgroups of population. However, women and men in the Central Region are much more likely than respondents in other regions to report having an STI or symptoms of an STI. The percentage of women who have ever had sex reporting an STI or symptoms of an STI is 10 percent or higher in Zomba, Lilongwe, and Mulanje, and in Lilongwe and Mulanje for men.

Figure 11.1 shows the percentage of women and men who reported having an STI or symptoms of an STI in the past 12 months who sought treatment from specific sources for their problems. Women are more likely than men to seek treatment for their infection (60 percent compared with 40 percent). Women also rely more on the advice of a traditional healer than men (31 percent compared with 11 percent), while men rely more on modern personnel or facilities such as health professionals, or pharmacy.

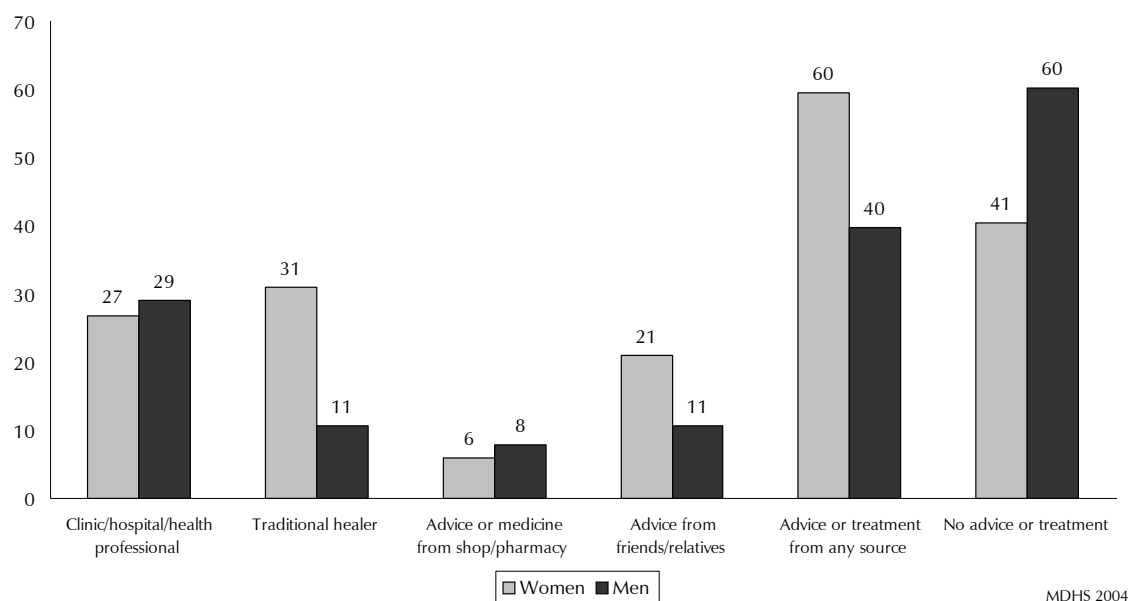
Table 11.14 Self-reporting of sexually transmitted infection (STI) and STI symptoms

Among women and men who ever had sex, percentage self-reporting an STI and/or symptoms of an STI in the 12 months preceding the survey, by background characteristics, Malawi 2004

Background characteristic	Women					Men				
	Percentage with STI	Percentage with abnormal genital discharge	Percentage with genital sore/ulcer	Percentage with STI/discharge/genital sore/ulcer	Number of women who ever had sex	Percentage with STI	Percentage with abnormal genital discharge	Percentage with genital sore/ulcer	Percentage with STI/discharge/genital sore/ulcer	Number of men who ever had sex
Age										
15-19	0.4	3.9	4.9	7.7	1,249	0.6	4.6	4.2	8.6	340
20-24	1.1	4.2	6.2	9.5	2,742	0.3	3.1	2.6	5.6	521
25-29	1.4	2.8	6.4	8.4	2,128	1.0	2.1	3.5	5.4	615
30-39	1.3	3.2	6.6	8.4	2,594	0.8	2.5	3.5	5.7	777
40-49	0.9	2.8	5.1	6.9	1,684	0.6	0.8	3.5	3.7	462
Marital status										
Never married	1.0	3.5	4.7	7.8	671	0.6	4.4	2.6	6.9	686
Married/living together	1.1	3.2	6.0	8.3	8,311	0.8	2.0	3.7	5.3	1,936
Divorced/separated/widowed	1.2	4.4	6.8	9.3	1,416	0.0	0.0	3.8	3.8	93
Residence										
Urban	1.1	2.9	5.3	7.1	1,766	0.9	1.9	2.6	4.5	552
Rural	1.1	3.5	6.1	8.6	8,631	0.7	2.7	3.6	5.9	2,163
Region										
Northern	0.8	1.7	1.5	2.9	1,316	1.6	1.0	2.0	2.5	329
Central	1.2	4.0	8.1	11.0	4,092	0.3	4.1	4.0	7.3	1,115
Southern	1.1	3.4	5.4	7.7	4,989	0.9	1.5	3.2	5.0	1,271
District										
Blantyre	0.5	3.7	5.1	7.1	830	1.7	1.0	1.4	3.7	284
Kasungu	0.6	1.7	5.6	6.7	438	0.9	1.6	2.6	3.3	130
Machinga	1.1	2.6	4.1	5.7	396	0.0	0.0	4.0	4.0	94
Mangochi	0.5	2.3	4.7	6.8	563	0.4	1.0	1.1	2.5	135
Mzimba	0.4	1.7	0.4	2.0	661	1.6	0.4	2.4	2.7	168
Salima	0.5	4.2	6.0	8.8	272	0.0	0.0	1.5	1.5	66
Thyolo	1.7	4.2	6.2	9.1	578	1.9	4.2	2.4	7.5	142
Zomba	0.8	3.3	9.9	11.3	584	0.8	1.2	6.1	6.5	144
Lilongwe	1.7	3.5	7.5	9.9	1,454	0.5	7.3	5.7	11.4	438
Mulanje	1.6	6.7	7.5	11.7	479	1.7	3.3	6.7	10.8	97
Other districts	1.2	3.4	6.2	8.8	4,144	0.3	1.8	3.1	4.4	1,018
Education										
No education	1.6	3.7	5.9	8.7	2,694	0.8	1.4	3.1	4.2	342
Primary 1-4	0.8	3.9	7.1	9.9	2,744	0.7	3.8	4.4	7.6	652
Primary 5-8	1.1	3.1	5.9	7.9	3,541	0.6	2.2	3.2	5.3	989
Secondary+	0.8	2.7	4.2	5.9	1,417	0.9	2.3	2.9	5.1	732
Wealth quintile										
Lowest	0.8	4.7	6.4	9.5	1,864	0.5	1.5	2.0	2.7	342
Second	1.5	3.3	6.4	8.8	2,102	0.3	3.8	2.6	6.6	539
Middle	1.0	3.2	5.6	8.0	2,157	1.0	1.3	5.5	6.7	604
Fourth	1.1	2.7	5.9	7.7	2,071	0.6	2.7	3.8	5.9	586
Highest	1.1	3.2	5.7	8.0	2,204	1.0	2.8	2.5	5.2	645
Total 15-49	1.1	3.4	6.0	8.4	10,397	0.7	2.5	3.4	5.6	2,715
Total men 15-54	na	na	na	na	na	0.7	2.5	3.4	5.5	2,863

na = Not applicable

Figure 11.1 Percentage of Women and Men Reporting an STI or Symptoms of an STI in the Past 12 Months Who Sought Care, by Source of Advice or Treatment



11.11 PREVALENCE OF INJECTIONS

Respondents in the 2004 MDHS were asked if they had any injections in the 12 months preceding the survey, how many injections they received in those 12 months, and who gave the last injection. It should be noted that medical injections can be self-administered (e.g., insulin for diabetes) and these injections are not included in the tabulation.

Table 11.15 shows the percentage of women and men age 15-49 who received an injection from a health care provider and whether the syringe and needle used were pulled from unopened package or not. Table 11.15 shows that 30 percent of women and 12 percent of men report having received an injection in the 12 months preceding the survey, with an average of 0.8 injections per year for women and 0.3 injections per year for men. Women age 20-29 are the most likely to report getting an injection (37-39 percent), probably because of injections given at ANC settings or for family planning purposes.

When asked whether the syringe used in the last injection came from a new unopened package, 94 percent of women and 90 percent of men gave a positive response. There are small variations in this proportion across subgroups of population.

respondents in the 2004 MDHS were asked the same set of questions as older respondents about whether condom use and limiting number of partners to one uninfected partner can help protect against getting the AIDS virus, and whether a healthy-looking person can have the AIDS virus (see Tables 11.3.1 and 11.3.2).

The data in Table 11.16 show the level of comprehensive knowledge among young people, namely, the proportion who, in response to prompted questions, agree that people can reduce their

Table 11.16 Comprehensive knowledge about AIDS and of a source of condoms among youth						
Percentage of young women and young men age 15-24 with comprehensive knowledge about AIDS and percent with knowledge of a source of condoms, by background characteristics, Malawi 2004						
Background characteristic	Women			Men		
	Percentage with comprehensive knowledge of AIDS ¹	Percentage who know a condom source ²	Number of women 15-24	Percentage with comprehensive knowledge of AIDS ¹	Percentage who know a condom source ²	Number of men 15-24
Age						
15-17	21.5	64.0	1,338	35.7	81.0	367
18-19	20.7	75.6	1,054	33.0	87.2	283
15-19	21.1	69.1	2,392	34.5	83.7	650
20-22	25.1	83.2	1,888	36.1	91.0	369
23-24	26.6	83.9	981	42.0	96.2	218
20-24	25.6	83.5	2,870	38.3	92.9	587
Marital status						
Never married	24.1	69.0	1,869	37.1	86.7	937
Ever had sex	28.0	82.9	600	37.9	91.6	561
Never had sex	22.2	62.4	1,269	35.9	79.2	375
Ever married	23.3	81.3	3,393	33.7	92.6	300
Residence						
Urban	30.3	82.4	1,063	48.0	94.5	269
Rural	21.9	75.5	4,199	33.1	86.3	968
Region						
Northern	26.1	86.1	739	32.1	87.9	168
Central	20.5	64.6	2,140	30.3	84.9	525
Southern	25.6	85.2	2,383	43.4	91.3	543
District						
Blantyre	31.5	83.2	424	48.9	94.7	105
Kasungu	14.6	68.3	224	34.6	85.8	61
Machinga	19.9	85.3	177	46.3	80.7	51
Mangochi	16.8	67.5	247	41.6	90.7	51
Mzimba	35.4	83.8	366	24.0	89.2	86
Salima	20.8	65.5	127	48.9	90.5	25
Thyolo	25.5	92.1	267	29.5	97.7	61
Zomba	24.1	90.2	294	39.8	97.2	62
Lilongwe	21.5	58.4	770	31.4	84.9	209
Mulanje	39.7	77.2	212	37.0	94.5	47
Other districts	21.0	79.4	2,154	36.1	85.5	478
Education						
No education	11.8	62.9	497	19.9	91.8	64
Primary 1-4	16.5	67.4	1,351	22.4	75.8	319
Primary 5-8	24.7	79.2	2,243	37.5	89.7	493
Secondary+	34.7	89.4	1,170	49.9	96.1	360
Wealth quintile						
Lowest	17.0	70.5	868	33.6	82.8	165
Second	19.1	72.4	1,013	29.6	82.5	248
Middle	22.1	75.8	1,061	34.5	86.7	225
Fourth	24.8	77.5	1,060	35.4	91.4	255
Highest	32.0	85.5	1,260	44.2	93.1	344
Total	23.6	76.9	5,262	36.3	88.1	1,237

¹ Respondents with a comprehensive knowledge say that use of condom for every sexual intercourse and having just one uninfected and faithful partner can reduce the chance of getting the AIDS virus, say that a healthy-looking person can have the AIDS virus, and reject the two most common local misconceptions.

² Friends, family members, and home are not considered sources for condoms.

chances of getting the AIDS virus by having sex with only one uninfected, faithful partner and by using condoms consistently; who know that a healthy-looking person can have the AIDS virus; and who know that HIV cannot be transmitted by mosquito bites or by supernatural means. Only two in ten young women and four in ten men meet the criteria of having comprehensive knowledge about HIV/AIDS. The level of comprehensive knowledge increases with age, education, and wealth status. It is much higher among urban youths than rural youths. Interestingly, compared to other youths, never married young women and men who have ever had sex are most likely to have comprehensive knowledge about HIV/AIDS. While regional differences among young women are not substantial, young men in the Southern Region are much more knowledgeable about HIV than their counterparts in other regions.

Because of the important role that condoms play in preventing the transmission of HIV, respondents were asked if they know where condoms could be obtained. Note that only responses about 'formal' sources were counted, that is friends and family, and other similar sources were not included. Table 11.16 shows that 77 percent of women 15-24 and 88 percent of men 15-24 can name a place where they can obtain male condoms. Knowledge of a source for condoms varies widely across background characteristics, with the lowest levels among women with no education and in the lowest socioeconomic status. Knowledge of a condom source among men generally follows the same pattern as that for women, with less variation.

11.13 AGE AT FIRST SEX AMONG YOUTH

This section discusses the initiation of sex, premarital and other higher-risk sex, and condom use among young women and men. Overall, 15 percent of women age 15-24 and 14 percent of men age 15-24 had sex by age 15. However, men's sexual debut occurs at a slightly earlier age than women; 18 percent of men 15-19 had sex by the time they are 15 compared with 14 percent of women of the same age. Marital status makes a difference in the likelihood of women having sex. While 19 percent of women 15-24 who have been married had sex by age 15, the corresponding proportion for never-married women is 8 percent. Women in the Southern Region start having sex at an earlier age than women in other regions, 21 percent of women in the Southern Region had sex by age 15, compared with 10 percent in the Northern and Central Regions. For women, education is related to the start of sexual act; 29 percent of women with no education had sex by age 15, compared with 5 percent for women with at least some secondary education.

Men show the same differentials, albeit less pronounced, as women in age at sexual debut by urban-rural residence, region, education, and wealth status. Women and men who know a source for condoms are slightly more likely to have had sex by age 15 than those who do not.

Table 11.17 Age at first sex among young women and men

Percentage of young women and men age 15-24 who had sex by exact age 15 and 18, by background characteristics, Malawi 2004

Background characteristic	Women			Men		
	15	18	Number of women 15-24	15	18	Number of men 15-24
Age						
15-17	12.8	a	1,338	18.1	a	367
18-19	15.7	62.4	1,054	17.7	59.4	283
15-19	14.1	a	2,392	18.0	a	650
20-22	16.2	57.5	1,888	8.9	44.8	369
23-24	14.1	56.5	981	9.4	52.6	218
20-24	15.5	57.1	2,870	9.1	47.7	587
Marital status						
Never married	7.5	23.4	1,869	14.3	46.8	937
Ever married	18.9	67.5	3,393	12.0	52.3	300
Residence						
Urban	11.0	45.0	1,063	3.7	40.0	269
Rural	15.8	53.5	4,199	16.5	50.4	968
Region						
Northern	9.6	47.8	739	14.5	42.1	168
Central	10.2	41.2	2,140	12.3	41.6	525
Southern	20.6	62.6	2,383	14.9	56.3	543
Education						
No education	28.6	71.9	497	13.7	70.2	64
Primary 1-4	20.3	60.8	1,351	14.3	50.0	319
Primary 5-8	13.5	52.3	2,243	17.2	47.7	493
Secondary+	5.2	31.9	1,170	8.5	43.1	360
Wealth quintile						
Lowest	20.3	60.5	868	16.7	48.3	165
Second	19.5	59.1	1,013	12.5	49.2	248
Middle	14.4	55.1	1,061	18.3	55.2	225
Fourth	12.1	48.9	1,060	18.0	52.6	255
Highest	9.9	39.7	1,260	7.1	39.4	344
Knows condom source¹						
Yes	15.2	54.1	4,048	14.1	50.3	1,090
No	13.7	44.3	1,214	11.5	31.9	147
Total 15-24	14.8	na	5,262	13.7	na	1,237

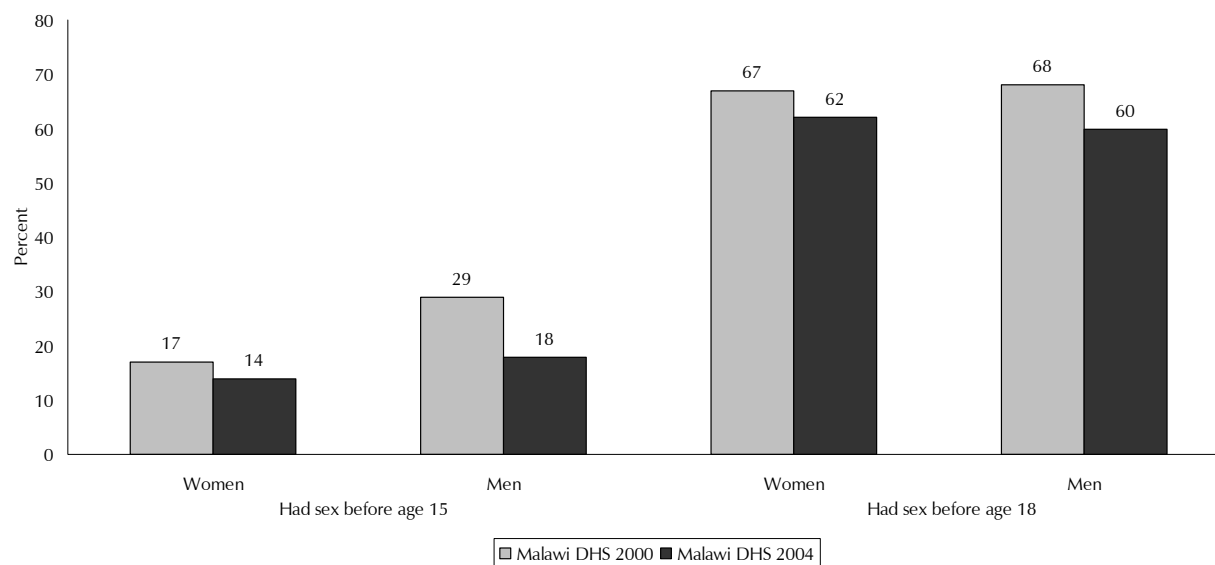
¹ Friends, family members, and home are not considered sources for condoms.

^a Omitted because less than 50 percent of the women/men had intercourse for the first time before reaching the beginning of the age group.

na = Not applicable

Figure 11.2 shows the trend in age at first sex among women and men age 15-19 from the 2000 MDHS and the 2004 MDHS. For both women and men, the proportion who have had sex by each specific age has declined. For example, while 17 percent of women age 15-19 in 2000 had sex by age 15, this proportion declined to 14 percent in 2004. The corresponding proportions for men are 29 and 18 percent, respectively.

Figure 11.2 Percentage of Respondents Age 15-19 Who Had Sex Before Age 15 and Percentage of Respondents Age 18-19 Who Had Sex Before Age 18, MDHS 2000 and MDHS 2004



11.14 CONDOM USE AT FIRST SEX AMONG YOUTH

Table 11.18 shows, among women and men age 15-24 who have ever had sex, the percentage who used a condom at their first sexual encounter. Young men are more likely than young women to report using a condom at first sex (26 percent compared with 16 percent). Reported condom use at first sex varies widely across background characteristics. Never-married women and men are much more likely than ever-married individuals to have used condoms. For women, the proportion is 40 percent for never-married women compared with 12 percent for ever-married women. Low levels of education and wealth status are associated with low levels of condom use at first sex. Interestingly, current knowledge of a source for condoms is not strongly related to the use of condoms at first sex. Young women in Blantyre and young men in Lilongwe are much more likely than those in other districts to use a condom at first sex (26 and 39 percent, respectively).

Table 11.18 Condom use at first sex among young women and men

Among women and men age 15-24 who have ever had sex, percentage who used a condom the first time they ever had sex, by background characteristics Malawi 2004

Background characteristic	Women		Men	
	Used a condom at first sex	Number of women 15-24 who have ever had sex	Used a condom at first sex	Number of men 15-24 who have ever had sex
Age				
15-17	25.8	442	28.3	147
18-19	21.9	807	30.3	193
15-19	23.3	1,249	29.4	340
20-22	14.2	1,780	25.8	312
23-24	8.8	962	21.5	210
20-24	12.3	2,742	24.0	521
Marital status				
Never married	39.9	600	32.1	561
Ever married	11.5	3,391	15.1	300
Residence				
Urban	26.2	765	36.7	173
Rural	13.3	3,227	23.5	689
Region				
Northern	16.8	506	22.3	98
Central	14.5	1,512	32.0	349
Southern	16.5	1,974	22.2	414
District				
Blantyre	26.2	342	(33.2)	77
Kasungu	13.1	165	27.0	45
Machinga	14.1	145	12.4	38
Mangochi	12.8	211	21.5	45
Mzimba	17.9	249	23.4	51
Salima	12.2	96	(16.5)	19
Thyolo	12.7	228	26.7	47
Zomba	16.0	242	10.8	52
Lilongwe	16.5	527	39.0	132
Mulanje	15.5	181	15.3	39
Other districts	14.4	1,605	26.2	315
Education				
No education	5.8	464	18.4	59
Primary 1-4	7.9	1,102	20.8	228
Primary 5-8	15.6	1,632	23.1	315
Secondary+	32.9	793	36.4	259
Wealth quintile				
Lowest	10.5	699	14.3	125
Second	12.9	844	26.9	172
Middle	10.5	835	17.1	171
Fourth	15.4	777	30.2	178
Highest	28.6	836	36.3	215
Knows condom source¹				
Yes	17.8	3,255	27.2	792
No	6.7	736	14.6	69
Total 15-24	15.8	3,991	26.2	861

Note: Figures in parentheses are based on 25-49 cases.

¹ Friends, family members, and home are not considered sources for condoms.

who used a condom the last time they had sex. Seven in ten never-married women 15-24 and four in ten never-married men age 15-24 report that they have never had sex. The proportion of unmarried youths who have never had sex drops rapidly as age increases. For instance, 81 percent of women age 15-17 have never had sex compared with 37 percent of women age 20-22.

A significant proportion of never-married respondents age 15-24 had sex in the past 12 months (21 percent of women and 39 percent of men). Less than half of never-married respondents reported using a condom during last sexual intercourse (39 percent of women and 46 percent of men). While never-married urban women are more likely to have had sex in the preceding 12 months than rural women (28 and 19 percent, respectively), the difference is not as pronounced among men (41 and 39 percent, respectively). A significantly larger proportion of single young women and men with the highest education and in the highest wealth quintile reported condom use at last sex.

11.16 HIGHER-RISK SEX AND CONDOM USE AMONG YOUTH

As mentioned above, condom use is an important tool in the fight to stop the spread of HIV/AIDS. While effective protection would require condom use at every sexual encounter, the most important sexual encounters to cover are those considered to be “higher risk.” In the context of this survey, higher-risk sex is defined as sex with a nonmarital, noncohabitating partner in the 12 months preceding the survey. Table 11.20 and Figure 11.3 show the proportion of young women and men who have been sexually active in the 12 months before the survey who have engaged in higher-risk sex and the extent to which they use condoms in higher-risk sexual encounters. Among sexually active youths age 15 to 24 years, the percentage of women and men who have engaged in higher-risk sex activity in the 12 months preceding the survey is 14 and 62 percent, respectively.

Condom use at higher-risk sex in the last year among youth shows a mixed pattern. Never-married female youths are less likely to report using a condom at last higher-risk sex than male youths (39 percent compared with 46 percent). For both women and men, condom use increases with education. As shown in the previous table, knowledge of a source for condoms does not make a difference in its use. Differences in the extent of higher risk sex among youth by regions are not significant. However, young women and men in the Southern Region are more likely to have had higher-risk sex in the 12 months preceding the survey, they are also the least likely to report using condoms.

Figure 11.3 and Figure 11.4 show trends in “ABC” prevalence among women and men age 15-24 between the 2000 MDHS and the 2004 MDHS. These women and men are classified into five groups of increasing risk, namely those who have never had sex; those who have had sex but not in the last 12 months; those who had sex with only one partner in the last 12 months and who used a condom the last time; those who had sex with more than one partner in the past 12 months and who used a condom the last time; and those who had sex with more than one partner in the past 12 months and who did not use a condom the last time. As seen from the figure, abstinence rates among women 15-24 remained at a similar level (23 to 24 percent) between 2000 and 2004, while for young men it increased from 24 percent to 30 percent. Reported condom use has increased, especially for men who had sex with one partner (2 percent in 2000 and 14 percent in 2004).

Table 11.20 Higher-risk sex and condom use at last higher risk sex in the past year among young women and men

Among young women age 15-24 who had sexual intercourse in the past 12 months, the percentage who had higher-risk sexual intercourse in the 12 months preceding the survey, and among those having higher-risk intercourse in the past 12 months, the percentage reporting that a condom was used at last higher-risk sex, by background characteristics, Malawi 2004

Background characteristic	Women				Men			
	Percentage engaging in higher-risk sex in past 12 months ¹	Number of women sexually active in past 12 months	Percentage used condom at last higher-risk sex ¹	Number of women 15-24 who had higher-risk sex in past 12 months	Percentage engaging in higher-risk sex in past 12 months ¹	Number of men sexually active in past 12 months	Percentage used condom at last higher-risk sex ¹	Number of men 15-24 who had higher-risk sex in past 12 months
Age								
15-17	44.9	380	37.9	171	98.6	96	28.1	95
18-19	18.3	715	30.9	131	91.9	127	42.0	116
15-19	27.5	1,095	34.9	302	94.8	223	35.8	211
20-22	8.9	1,614	34.3	144	53.2	249	54.7	133
23-24	6.0	885	39.0	53	35.0	186	66.3	65
20-24	7.9	2,499	35.6	197	45.4	435	58.5	198
Marital status								
Never married	99.0	395	38.5	391	98.5	366	45.9	360
Ever married	3.4	3,199	23.0	108	16.6	292	53.5	49
Residence								
Urban	22.4	685	48.6	153	74.2	129	58.2	95
Rural	11.9	2,910	29.2	346	59.2	529	43.3	313
Region								
Northern	11.5	426	52.9	49	62.4	73	49.2	45
Central	11.5	1,374	46.4	158	58.4	262	51.1	153
Southern	16.3	1,794	26.1	292	65.1	323	43.1	210
District								
Blantyre	21.9	315	32.3	69	(58.0)	55	*	32
Kasungu	6.0	151	*	9	50.2	35	(44.2)	18
Machinga	11.4	131	(17.5)	15	79.6	34	(20.6)	27
Mangochi	13.6	184	(26.4)	25	65.4	38	(29.2)	25
Mzimba	9.4	205	(53.5)	19	(58.0)	32	(61.0)	18
Salima	9.7	87	*	8	(45.4)	17	*	8
Thyolo	19.2	216	19.7	41	(54.6)	38	(48.2)	21
Zomba	20.5	223	22.0	46	67.5	43	(25.5)	29
Lilongwe	13.8	492	(52.6)	68	(68.2)	96	(55.2)	65
Mulanje	19.9	161	16.9	32	(65.0)	29	(28.2)	19
Other districts	11.6	1,429	38.9	166	61.1	241	51.1	147
Education								
No education	5.3	434	(10.4)	23	(46.0)	53	(14.5)	24
Primary 1-4	7.9	1,018	21.8	80	58.5	187	41.6	110
Primary 5-8	14.2	1,481	30.7	210	63.6	238	42.8	151
Secondary+	28.1	662	48.9	186	68.7	180	62.5	124
Wealth quintile								
Lowest	13.2	620	21.6	82	48.2	103	39.7	50
Second	7.6	792	15.1	60	59.4	139	46.4	82
Middle	8.5	776	35.6	66	52.4	138	39.2	72
Fourth	13.1	691	33.0	91	64.7	123	44.9	79
Highest	28.0	715	47.5	201	80.5	155	55.4	125
Knows condom source²								
Yes	13.9	2,827	34.8	394	61.5	591	48.3	364
No	13.8	767	36.5	106	67.8	66	(34.4)	45
Total 15-24	13.9	3,594	35.2	499	62.1	658	46.8	409

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

¹ Sexual intercourse with a partner who neither was a spouse nor who lived with the respondent

² Friends, family members and home are not considered sources for condoms.

Figure 11.3 Scale of Risk for Young Women: Abstinence, Being Faithful, and Condom Use

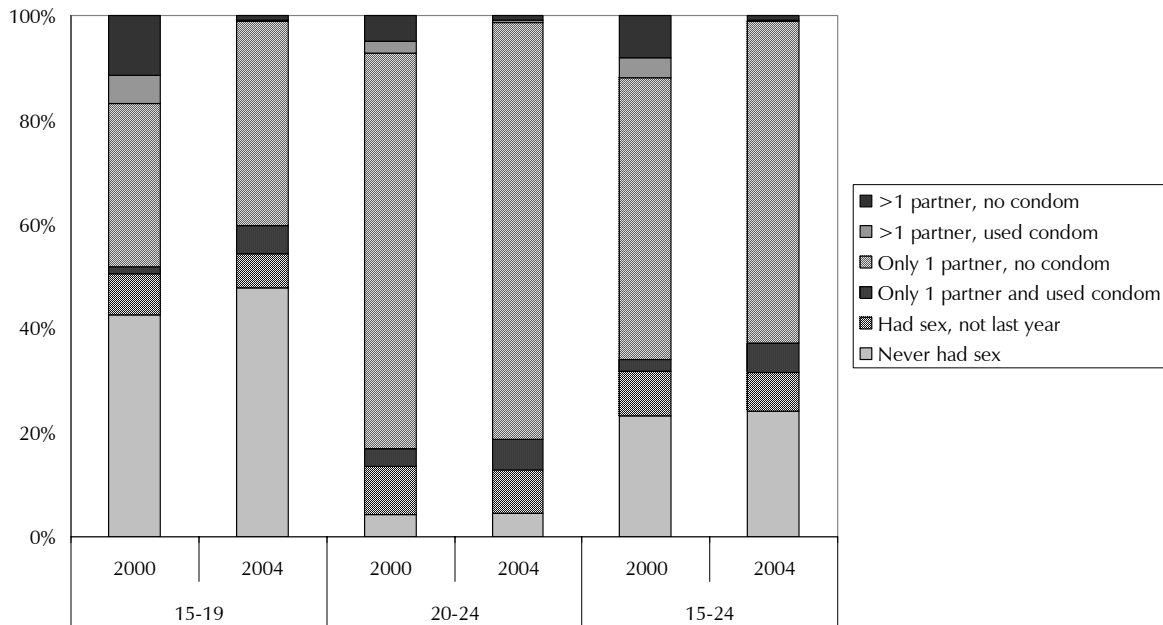
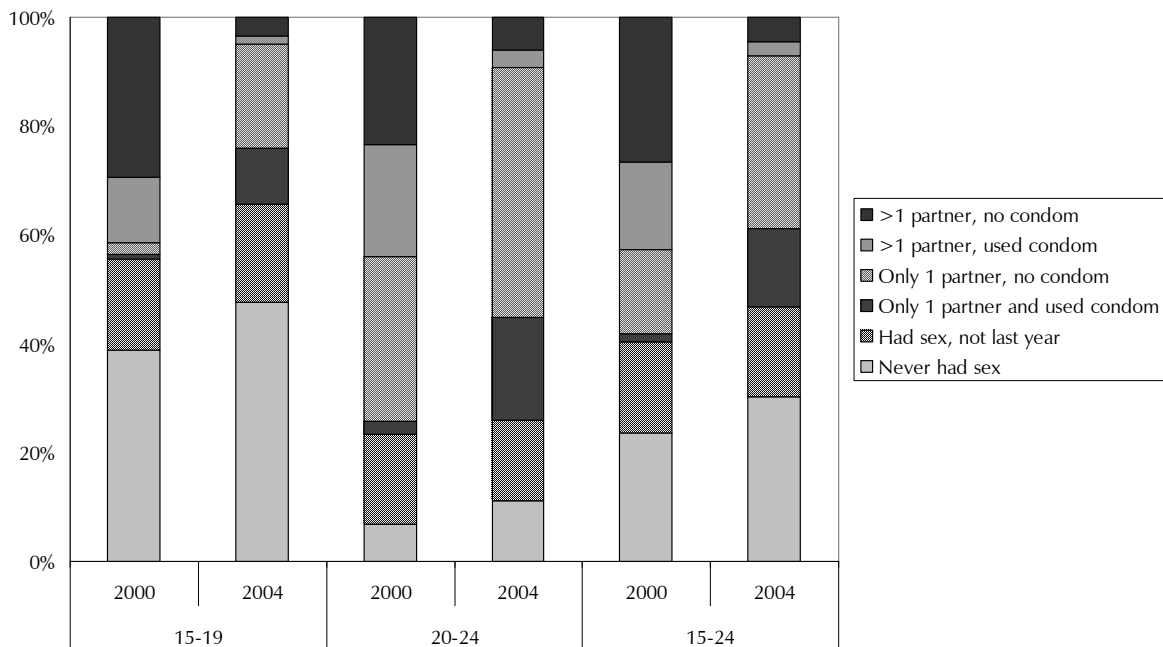


Figure 11.4 Scale of Risk for Young Men: Abstinence, Being Faithful, and Condom Use



In many societies, young women have sexual relationships with men who are considerably older than they are. This practice can contribute to the wider spread of HIV and other STIs, because if a younger, uninfected partner has sex with an older, infected partner, this can introduce the virus into a younger, uninfected cohort. To investigate this practice, in the 2004 MDHS, women age 15-

19 who had sex in the 12 months preceding the survey with a nonmarital, noncohabiting partner were asked whether the partner was younger, about the same age, or older than they.

Table 11.21 shows the percentage of young women who had sex with nonmarital non-cohabiting men who are 10 years or older than they are. Overall, 2 percent of teenagers who had nonmarital sex report having sex with an older man. Examination of differentials by background characteristics is hampered by small sample sizes.

Table 11.21 Age-mixing in sexual relationships		
Among women age 15-19 who had higher-risk sexual intercourse ¹ in the 12 months preceding the survey, percentage who had sex with a man who was 10 years or more older than themselves, by background characteristics, Malawi 2004		
Background characteristic	Percentage who had non-marital sex with a man 10+ years older	Number of women 15-19 having non-marital sex in past 12 months
Age		
15-17	0.9	171
18-19	2.4	131
Marital status		
Never married	1.4	261
Ever married	(2.7)	40
Residence		
Urban	0.6	78
Rural	1.9	224
Region		
Northern	(4.5)	26
Central	1.2	94
Southern	1.3	182
Education		
No education	*	10
Primary 1-4	1.9	57
Primary 5-8	1.5	154
Secondary+	1.5	81
Wealth quintile		
Lowest	0.0	49
Second	(3.0)	39
Middle	0.0	47
Fourth	1.1	61
Highest	2.7	106
Knows condom source¹		
Yes	1.5	235
No	1.6	67
Total 15-19	1.6	302

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

¹ Friends, family members, and home are not considered sources of condoms.

11.17 HIV TESTING AMONG YOUTH

Young people may feel that there are barriers to accessing and using many services and facilities, particularly for sensitive concerns relating to sexual health, including sexually transmitted infections, such as HIV/AIDS. Data in Table 11.22 present the degree of reach of HIV testing services among sexually active young people and their awareness of their HIV status. Overall, 5 percent of sexually active women and 9 percent of sexually active men were tested for HIV and received the test results in the 12 months preceding the survey. While the proportion of young women who have been tested for HIV testing decreases with age, young men show the reverse relationship. Men age 20-24 are almost twice as likely to be tested as men 15-19 (11 and 6 percent, respectively).

For both women and men, those who have never married are more likely to have taken the test than those who are married or are no longer married. Young women and men in urban areas are much more likely than those in rural areas to have been tested for HIV. For men, the proportion is 19 and 7 percent, respectively. As in the case with the general population, young women and men in the highest wealth quintile are more likely than those in lower quintiles to have taken the HIV test.

Table 11.22 Recent HIV tests among youth

Among young women and young men age 15-24 who had sexual intercourse in the 12 months preceding the survey, the percentage who had an HIV test in the past 12 months and received the results of the test, by background characteristics, Malawi 2004.

Background characteristic	Women		Men	
	Percentage tested in past 12 months and received results	Number of women	Percentage tested in past 12 months and received results	Number of men
Age				
15-17	6.8	380	0.7	96
18-19	5.0	715	9.1	127
15-19	5.6	1,095	5.5	223
20-22	4.1	1,614	10.5	249
23-24	4.2	885	11.0	186
20-24	4.1	2,499	10.7	435
15-24	4.6	3,594	8.9	658
Marital status				
Never married	10.0	395	10.0	366
Married/Living together	3.7	2,975	8.0	269
Divorced/Separated/Widowed	6.0	224	3.0	23
Residence				
Urban	7.9	685	18.6	129
Rural	3.8	2,910	6.6	529
Region				
Northern	3.8	426	10.8	73
Central	3.9	1,374	7.8	262
Southern	5.3	1,794	9.4	323
District				
Blantyre	8.5	315	15.1	55
Kasungu	3.5	151	5.7	35
Machinga	1.2	131	2.7	34
Mangochi	2.8	184	6.2	38
Mzimba	3.8	205	15.4	32
Salima	1.2	87	0.0	17
Thyolo	8.5	216	29.4	38
Zomba	3.4	223	0.0	43
Lilongwe	6.0	492	10.8	96
Mulanje	2.6	161	5.6	29
Other districts	4.0	1,429	7.1	241
Education				
No education	2.3	434	6.0	53
Primary 1-4	2.1	1,018	5.2	187
Primary 5-8	4.0	1,481	7.3	238
Secondary+	11.1	662	15.9	180
Wealth quintile				
Lowest	2.8	620	5.9	103
Second	3.2	792	6.6	139
Middle	2.3	776	6.1	138
Fourth	4.5	691	5.7	123
Highest	10.2	715	18.2	155
Knows condom source¹				
Yes	5.0	2,934	9.7	605
No	2.7	660	0.0	53
Total	4.6	3,594	8.9	658

¹ Friends, family members, and home are not considered sources of condoms.

11.18 ORPHANHOOD AND SCHOOL ATTENDANCE

As a consequence of high adult mortality rates partly due to HIV/AIDS-related infections in Malawi, the number of orphans has increased in recent years. The 2004 MDHS collected information on orphanhood and fostering. Table 11.23 shows the percentage of children 10-14 who are attending school by survival status of parents and the ratio of de jure children age 10-14 who have lost both parents and who are attending school to children who are not orphaned and are living with at least one parent and who are attending school.

Table 11.23 shows that children whose parents are both alive and who are living with at least one parent have the best chances of attending school than other children (90 percent compared with 89 percent or less). However, the survivorship of the parents and the living arrangements of the children do not make much difference in the child's chances of attending school. In fact, for all groups of children, orphaned children have about the same chance of attending school as non-orphaned children.

Table 11.23 Schooling of children age 10-14 by orphanhood and living arrangements

Ratio of the percentage of de jure children age 10-14 attending school among those whose parents have both died to the percentage of children age 10-14 attending school and whose parents are both alive and at least one of whom lives with the child, by background characteristics, Malawi 2004

Background characteristic	Both alive, living with at least one parent		Both alive, not living with either parent		Only mother dead		Only father dead		Both parents dead		Mother, father or both dead		Ratio of orphaned to non-orphaned children in school
	Percent in school	Number	Percent in school	Number	Percent in school	Number	Percent in school	Number	Percent in school	Number	Percent in school	Number	
Sex													
Male	89.7	2,675	84.1	556	88.4	167	87.7	555	85.5	269	86.6	991	1.0
Female	90.8	2,738	84.6	744	90.0	216	86.3	561	89.4	259	84.9	1,036	1.0
Residence													
Urban	95.3	744	86.6	199	89.2	73	93.2	211	91.3	98	90.2	382	1.0
Rural	89.4	4,669	84.0	1,101	89.4	310	85.5	905	86.6	430	84.7	1,645	1.0
Region													
Northern	97.7	725	94.7	147	93.1	51	96.3	151	91.3	66	94.1	268	0.9
Central	89.7	2,361	82.1	666	87.8	164	86.7	462	86.4	205	86.2	832	1.0
Southern	88.4	2,327	84.4	487	89.6	168	84.4	502	87.2	257	82.9	927	1.0
Wealth quintile													
Lowest	82.6	942	85.9	365	86.6	79	78.3	300	81.6	116	79.3	496	1.0
Second	85.4	1,137	83.9	216	82.4	63	88.6	195	88.9	87	86.0	345	1.0
Middle	89.6	1,125	83.2	214	93.9	69	85.7	205	89.0	84	85.0	358	1.0
Fourth	94.1	1,122	83.7	250	88.0	71	90.6	193	81.6	110	86.1	375	0.9
Highest	98.5	1,087	84.5	255	93.6	100	95.3	222	95.6	131	92.8	453	1.0
Total	90.2	5,413	84.4	1,300	89.3	383	87.0	1,116	87.4	528	85.7	2,027	1.0

11.19 MALE CIRCUMCISION

In Malawi, circumcision is practiced in many communities and often serves as a rite of passage to adulthood. Recently, male circumcision has been associated with lower transmission of STIs, including HIV. In order to investigate this relationship, men interviewed in the 2004 MDHS were asked if they were circumcised.

Table 11.24 shows that 21 percent of Malawian men are circumcised. Younger men in age groups 15-19 and 20-24 are less likely to have been circumcised (17 to 18 percent) than those at older ages (21 percent or higher). This could indicate a decline in the practice, although it is also possible that some young men may not have yet gone through the circumcision process. There are no differentials by urban-rural residence, however, men living in the Southern Region are much more likely to be circumcised than men in other regions (33 percent, compared with 5 percent in the Northern Region and 12 percent in the Central Region).

The practice of male circumcision varies widely across ethnic groups and religion. While 82 percent of Yao men and 30 percent of Lomwe men are circumcised, the rate for other specific ethnic groups is only 7 percent or lower. Muslims (93 percent) are much more likely to be circumcised than those who belong to other religious groups. Circumcision is also practiced among Christians; 20 percent of Anglican men, 21 percent of men who belong to Seventh Day Adventist or Baptist, and 14 percent of men whose religion is other Christianity are circumcised.

Table 11. 24 Male circumcision

Percentage of men age 15-49 who have been circumcised, by background characteristics, Malawi 2004

Background characteristic	Percent circumcised	Number of men
Age		
15-19	18.4	650
20-24	17.1	587
25-29	20.8	634
30-34	21.4	485
35-39	25.0	294
40-44	26.7	282
45-49	22.3	182
Residence		
Urban	21.3	661
Rural	20.5	2,453
Region		
Northern	5.0	404
Central	12.2	1,302
Southern	33.1	1,408
Education		
No education	26.3	350
Primary 1-4	24.9	746
Primary 5-8	19.9	1,171
Secondary+	15.8	845
Wealth quintile		
Lowest	17.5	383
Second	22.5	614
Middle	20.1	666
Fourth	22.6	666
Highest	19.8	785
Ethnicity		
Chewa	6.7	1,019
Tumbuka	2.0	303
Lomwe	29.8	527
Tonga	4.0	65
Yao	82.3	412
Sena	7.4	149
Nkonde	(8.6)	48
Ngoni	4.2	366
Other	18.4	225
Religion		
Catholic	8.6	660
CCAP	6.1	588
Anglican	19.4	73
Seventh Day Advenist/ Baptist	21.2	208
Other Christian	13.9	1,123
Muslim	93.3	359
No religion	*	91
Total	20.7	3,114

Note: Total includes some men with other religion. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

HIV PREVALENCE AND ASSOCIATED FACTORS

12

John Chipeta, Erik Schouten, John Aberle-Grasse

AIDS is one of the greatest public health and social problems threatening the human race. The greatest burden of the HIV/AIDS pandemic is in sub-Saharan Africa. According to the Joint UN Committee on HIV/AIDS (UNAIDS, 2004), an estimated 38 million people worldwide were living with HIV in 2003, of which 5 million were newly infected. In 2003, two-thirds of all people living with HIV/AIDS (25 million) were in sub-Saharan Africa, which has about 10 percent of the world's population.

Malawi has one of the highest national prevalence rates in the world. Heterosexual contact is the principal mode of HIV transmission, while mother-to-child transmission (MTCT) accounts for about 25 percent of all new HIV infections (NAC, 2004a).

Monitoring and evaluation data for 2004 show a momentous increase in programme intervention coverage. Subsequently, some positive changes in behaviour, especially among men, have been observed and documented (NAC, 2004a). The National AIDS Commission (NAC) has coordinated the development of a National AIDS Framework for 2005 to 2009, which is expected to galvanise a decentralised comprehensive multi-sectoral national response. With the strengthening of the multi-sectoral national response to HIV and AIDS, HIV transmission is expected to decline. However, HIV prevalence will likely remain high or even increase for some time, as antiretroviral therapy is scaled up. Consequently, deaths due to AIDS are reduced.

As in most sub-Saharan countries, Malawi monitors HIV prevalence primarily through antenatal clinic (ANC) sentinel surveillance. The surveillance is conducted every one to two years using consistent methodology in the same population group. The system has collected data from 19 sentinel sites dating back to 1994. Some sentinel sites started data collection in 1990. Data from the Malawi HIV sentinel surveillance indicate that HIV prevalence among antenatal attendees increased rapidly from the late 1980s to the early 1990s. By the middle of the 1990s, prevalence stabilised and has since remained fairly constant.

ANC sentinel surveillance systems use unlinked anonymous methods for specimen collection and testing to avoid participation bias which can significantly affect the HIV prevalence rates. However, other biases are inherent in sentinel surveillance systems: health facilities are not randomly selected and tend to be urban; pregnant women may be having unprotected sex at a greater rate than the general population, which could overestimate the prevalence; the prevalence in ANC attendees may underestimate what is happening in the general population because women with HIV associated infertility are not captured; and men and non-pregnant women are not included in the sentinel surveillance sample. To obtain a nationally-representative HIV prevalence estimate for all adults, sentinel surveillance data should be adjusted based on assumptions about the biases in the clientele who use the selected facilities and part of the population that does not use antenatal clinic services.

The 2004 MDHS is the third survey in Malawi conducted as part of the international DHS program, and the first to anonymously link the HIV results with key behavioural, social and

demographic factors. With the inclusion of HIV testing in the MDHS, for the first time Malawi has a national population-based HIV prevalence estimates for women and men. Population-based surveys are expected to give more accurate national estimates compared with that based on ANC sentinel surveillance results. However, population-based surveys are expensive and logistically difficult to carry out and are therefore not conducted every year. Results from population-based surveys can be used to calibrate the existing ANC sentinel surveillance data and to point out improvements in the sentinel surveillance system.

This chapter presents characteristics of respondents who accepted and refused to take an HIV test. Findings are presented on HIV prevalence by various demographic and socioeconomic characteristics. Being the first survey to present estimates of HIV prevalence at the national, urban-rural, regional, and district levels, data from the 2004 MDHS serve as baseline findings. Trend analysis can only be done after another national sero-survey is conducted.

12.1 COVERAGE OF HIV TESTING

As described in Chapter 1, every third households in the 2004 MDHS sample was selected for individual interviews with male respondents. All men age 15-54 were eligible for individual interview. In the same households, all women age 15-49 and all men age 15-54 were eligible for HIV testing. Overall, 4,071 women age 15-49 and 3,797 men age 15-54 were identified as eligible for testing. Of these, testing was successfully conducted on 2,686 women and 2,581 men, resulting in a response rate of 70 percent for women and 63 percent for men.

Table 12.1 presents the coverage rates for HIV testing by sex, urban-rural residence, and region. Based on the reason for nonresponse, respondents who were not tested are divided into four categories:

- those who refused testing when asked for informed consent by the health worker (22 percent overall)
- those who were interviewed in the survey, but who were not at home when the health worker arrived for testing and were not found on callbacks (less than one percent)
- those who were not at home for the testing and were never interviewed (9 percent), and
- those who were missing test results for some other reason, such as they were incapable of giving consent for testing, there was a mismatch between the questionnaire and the blood sample, or there was a technical problem in taking blood (1 percent).

While refusal rates for women and men are similar (23 percent and 22 percent, respectively), women are more likely to be found at home than men; 5 percent of women were absent compared with 14 percent of men. The difference in nonresponse rates between women and men are more significant in urban areas and in the Southern Region.

Table 12.1 shows that response rates are consistently higher in rural areas. For both women and men, urban respondents are more likely to refuse taking the test or to be absent during the survey. For example, nonresponse resulting from absence for urban men is 20 percent compared with 13 percent for rural men. Across regions, respondents in the Northern Region are much less likely than those in the other regions to refuse testing. Overall, the refusal rate in the Northern

Region is 14 percent, compared with 26 percent in the Central Region and 22 percent in the Southern Region. Interestingly, as discussed in the next section, the prevalence rate among men in the Southern Region is also higher compared with rates in the other two regions.

Table 12.1 Coverage of HIV testing by residence and region						
Percent distribution of women age 15-49 and men age 15-54 eligible for HIV testing by testing status, according to residence and region (unweighted), Malawi 2004						
Testing status	Residence		Region			Total
	Urban	Rural	Northern	Central	Southern	
WOMEN						
Tested	65.3	71.2	78.3	66.0	71.3	70.4
Refused	26.4	21.9	16.1	26.3	21.5	22.5
Absent for testing	7.0	5.1	5.1	5.5	5.3	5.3
Interviewed in survey	0.0	0.3	0.3	0.2	0.3	0.3
Not interviewed	7.0	4.7	4.7	5.3	5.0	5.1
Other/missing	1.2	1.9	0.5	2.2	1.9	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	571	3,500	572	1,478	2,021	4,071
MEN						
Tested	55.7	64.8	76.5	61.7	60.9	63.3
Refused	23.9	21.5	10.9	26.1	21.7	21.9
Absent for testing	19.8	13.1	11.5	11.7	16.9	14.2
Interviewed in survey	0.0	0.1	0.0	0.2	0.0	0.1
Not interviewed	19.8	13.0	11.5	11.4	16.9	14.1
Other/missing	0.6	0.6	1.2	0.5	0.5	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	632	3,165	515	1,424	1,858	3,797
TOTAL						
Tested	60.3	68.2	77.5	63.9	66.3	67.0
Refused	25.1	21.7	13.6	26.2	21.6	22.2
Absent for testing	13.7	8.9	8.1	8.5	10.9	9.6
Interviewed in survey	0.0	0.2	0.2	0.2	0.2	0.2
Not interviewed	13.7	8.7	7.9	8.3	10.7	9.4
Other/missing	0.9	1.3	0.8	1.3	1.2	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,203	6,665	1,087	2,902	3,879	7,868

Table 12.2.1 shows that response rates also vary across the respondent's background characteristics. HIV testing coverage among women varies from 65 percent among those age 15-19 to 76 percent among women age 40-44. Women with no education and in the highest wealth quintile are the least likely to have been tested. The response rate for women in the richest group is 67 percent, with 26 percent of non response due to refusal and 7 percent due to absence. The response rate for testing in Lilongwe is surprisingly low (39 percent). Field implementation of blood sample collection was not adequate to provide district-specific estimates (see Section 12.2.2 below for a modeling approach that provides a prevalence estimate). In other oversampled districts, the rate ranges from 65 percent in Blantyre to 77 percent in Salima.

Testing coverage among men also varies by age (Table 12.2.2). Men 15-19 are the least likely to be tested (60 percent) while men age 35-44 years have the highest coverage (67 to 68 percent). It is interesting to note that response rates among men increases with education ranging from 57 percent for men with no education to 65 percent or men with secondary or higher education. As

in the case with women, coverage is low among men in the lowest and highest wealth quintile, 59 and 57 percent, respectively.

Table 12.2.1 Coverage of HIV testing by background characteristics: women

Percent distribution of women age 15-49 eligible for HIV testing by testing status, according to background characteristics (unweighted), Malawi 2004

Background characteristic	Testing status				Total	Number
	Tested	Refused	Absent for testing	Other/missing		
Age						
15-19	65.3	24.4	8.5	1.8	100.0	835
20-24	70.6	23.9	4.2	1.3	100.0	979
25-29	70.8	21.8	5.2	2.2	100.0	744
30-34	72.9	20.9	3.9	2.3	100.0	532
35-39	68.7	24.6	5.0	1.7	100.0	403
40-44	75.9	18.0	4.6	1.5	100.0	323
45-49	74.9	18.8	3.9	2.4	100.0	255
District						
Blantyre	64.7	23.0	10.6	1.7	100.0	235
Kasungu	75.6	18.2	5.2	1.0	100.0	308
Machinga	73.5	21.6	3.8	1.1	100.0	264
Mangochi	67.8	22.7	2.9	6.6	100.0	273
Mzimba	73.8	21.4	4.5	0.3	100.0	332
Salima	77.0	17.1	3.6	2.4	100.0	252
Thyolo	69.0	21.4	7.9	1.7	100.0	290
Zomba	73.2	23.3	3.5	0.0	100.0	257
Lilongwe	39.0	51.5	7.5	2.1	100.0	241
Mulanje	70.5	23.4	5.4	0.8	100.0	261
Other districts	73.3	19.6	5.2	2.0	100.0	1,358
Education						
No education	66.9	23.2	7.3	2.7	100.0	1,048
Primary 1-4	70.9	23.4	4.3	1.4	100.0	1,064
Primary 5-8	72.7	21.0	4.5	1.9	100.0	1,389
Secondary+	70.0	23.3	5.8	0.9	100.0	570
Wealth quintile						
Lowest	69.5	23.5	5.4	1.5	100.0	718
Second	70.7	22.2	4.8	2.3	100.0	817
Middle	72.1	20.5	4.8	2.6	100.0	894
Fourth	72.1	21.3	5.3	1.4	100.0	875
Highest	66.6	25.7	6.5	1.2	100.0	767
Total	70.4	22.5	5.3	1.8	100.0	4,071

As in the case of women, men in Lilongwe are the least likely to be tested for HIV (38 percent). Response rates are also low in Mangochi (50 percent) and Blantyre (54 percent). On the other hand, men in Kasungu have the highest response rates (76 percent). In all districts, absence is an important reason for nonresponse among men. The highest absence rate was observed in Blantyre (26 percent) and Thyolo (22 percent). The highest refusal rate is recorded in Lilongwe (49 percent), while the lowest refusal rate is in Salima (17 percent).

Table 12.2.2 Coverage of HIV testing by background characteristics: men

Percent distribution of men age 15-54 eligible for HIV testing by testing status, according to background characteristics (unweighted), Malawi 2004

Background characteristic	Testing status				Total	Number
	Tested	Refused	Absent for testing	Other/missing		
Age						
15-19	59.8	25.0	14.7	0.5	100.0	761
20-24	61.6	22.5	15.7	0.3	100.0	690
25-29	64.5	21.5	13.2	0.7	100.0	710
30-34	63.7	21.0	14.9	0.4	100.0	557
35-39	67.0	18.0	13.8	1.2	100.0	333
40-44	68.1	18.5	12.5	0.9	100.0	335
45-49	61.8	24.6	12.6	1.0	100.0	207
50-54	64.7	21.1	13.7	0.5	100.0	204
District						
Blantyre	53.9	19.6	25.7	0.7	100.0	280
Kasungu	76.2	16.9	6.3	0.6	100.0	332
Machinga	66.5	19.1	13.9	0.4	100.0	230
Mangochi	50.4	29.1	18.8	1.7	100.0	234
Mzimba	73.2	12.8	12.5	1.6	100.0	313
Salima	68.8	14.9	15.3	0.9	100.0	215
Thyolo	56.5	21.9	21.6	0.0	100.0	269
Zomba	67.1	21.1	11.8	0.0	100.0	237
Lilongwe	38.2	49.0	12.0	0.8	100.0	259
Mulanje	62.6	20.9	15.6	0.9	100.0	211
Other districts	66.6	21.0	12.2	0.2	100.0	1,217
Education						
No education	56.7	25.1	18.0	0.2	100.0	467
Primary 1-4	60.4	24.9	13.9	0.8	100.0	961
Primary 5-8	66.8	19.7	12.9	0.6	100.0	1,413
Secondary+	64.5	20.6	14.3	0.5	100.0	950
Wealth quintile						
Lowest	58.9	24.4	16.5	0.2	100.0	509
Second	64.6	22.2	12.4	0.8	100.0	765
Middle	67.2	19.3	13.3	0.2	100.0	865
Fourth	67.3	18.6	12.9	1.2	100.0	851
Highest	56.5	26.3	16.7	0.5	100.0	807
Total	63.3	21.9	14.2	0.6	100.0	3,797

Note: Total includes some men with missing information on education

12.2 HIV PREVALENCE

12.2.1 HIV Prevalence by Socioeconomic Characteristics

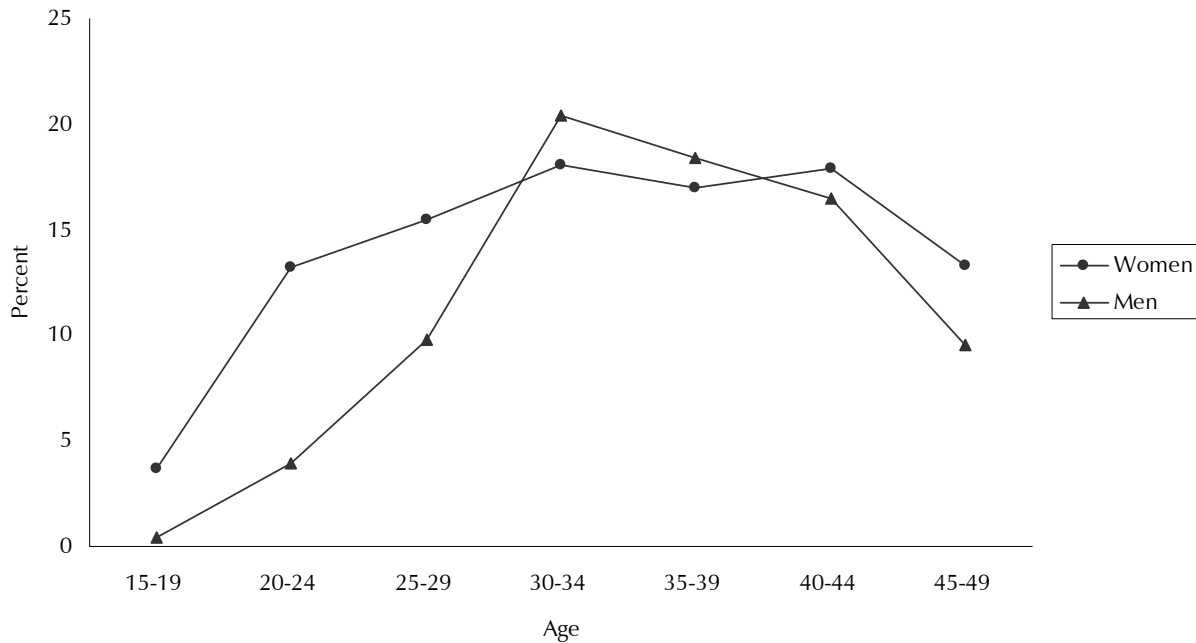
The 2004 MDHS indicates that 12 percent of the population age 15-49 in Malawi is living with HIV/AIDS (Table 12.3). HIV prevalence among women is higher for women than for men (13 percent compared with 10 percent). Prevalence peaks at 19 percent for women and men age 30-34, 18 percent for women and 20 percent for men. Women start getting the infection at a younger age than men; the prevalence among women age 15-19 is 4 percent compared with less than 1 percent for men of the same age. HIV prevalence among women is higher than that for men until age group 30-34 and 35-39. At ages 40-49, the prevalence among men is again lower than the prevalence among women (Figure 12.1).

Surveillance of AIDS cases indicate that very few children who were infected through mother-to-child transmission survive up to 15 years of age. Therefore, prevalence among the youth represents more recent HIV infections and is recognised and used as a proxy indicator for tracking incidence. Overall, HIV prevalence among women and men age 15-24 is 6 percent. Prevalence among women in this age group is more than four times higher than that for men 15-24 (9 and 2 percent, respectively). These figures are useful in measuring progress towards the National HIV and AIDS Action Framework 2005 to 2009.

Age	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
15-19	3.7	500	0.4	467	2.1	967
20-24	13.2	661	3.9	442	9.5	1,103
25-29	15.5	477	9.8	509	12.6	986
30-34	18.1	382	20.4	397	19.2	779
35-39	17.0	257	18.4	262	17.7	520
40-44	17.9	235	16.5	242	17.2	477
45-49	13.3	173	9.5	146	11.6	319
Total age 15-24	9.1	1,161	2.1	910	6.0	2,071
Total age 15-49	13.3	2,686	10.2	2,465	11.8	5,150
Total age 15-54	na	na	10.2	2,580	na	na

na = Not applicable

**Figure 12.1 Percentage HIV Positive Among Women and Men
Age 15-49**



MDHS 2004

Table 12.4 shows that urban residents have a significantly higher risk of HIV infection than rural residents. While 18 percent of urban women are HIV positive, the corresponding proportion for rural women is 13 percent. For men, the urban-rural difference in HIV prevalence is even greater; urban men are nearly twice as likely to be infected as rural men (16 and 9 percent, respectively). Since 85 percent of Malawi's population live in rural areas, the greatest burden of HIV infection is in the rural population.

The HIV epidemic shows regional heterogeneity. The prevalence among women in the three regions is similar to what has been seen in ANC sentinel surveillance estimates, high in the Southern Region (20 percent), and low in the Northern (10 percent) and Central (7 percent) Regions. The regional differential in HIV prevalence for men is somewhat different than that for women, high in the Southern Region (15 percent) and lower in the Northern (5 percent) and Central (6 percent) Regions.

ANC surveillance system data and VCT data for Malawi show that women with secondary or higher education have higher infection levels than women with less education (NAC, 2004a). Data in Table 12.4 show that HIV prevalence is somewhat constant across education levels, but higher among women with secondary or higher education. For men, however, education has a positive relationship with the risk of infection; the rate of infection increases with education.

Work status is related to the HIV rate for both women and men. Fifteen percent of working women are HIV positive compared with 12 percent of women who are not working. For men, the difference is more dramatic, 13 percent for working men, compared with 6 percent for men who are not working. Rates of HIV infection also increase with the wealth quintile; overall, the infection rate in the highest quintile is two times that in the lowest quintile (16 and 8 percent, respectively). This

Respondents who identify themselves as Chewa and Tumbuka have the lowest prevalence compared with other ethnic groups (7 percent each). On the other hand, HIV prevalence is highest among the Lomwe ethnic group (19 percent). Yaos and Ngonis also show high prevalence compared with other groups, both 15 percent.

Across religions, HIV prevalence varies by gender. Anglican and Muslim women have the highest infection rate (18 and 17 percent, respectively). For men, those who are Seventh Day Adventists have the highest rate (17 percent).

12.2.2 Adjusted HIV Prevalence

Because of the low response rate for HIV testing in Lilongwe (see Tables 12.2.1 and 12.2.2), and the implausible pattern of infection where male prevalence is higher than female prevalence, additional analysis of the Lilongwe results was undertaken. A statistical model was developed using the questionnaire information from individuals who were tested for HIV in Malawi outside of Lilongwe. A nationally common set of predictor variables, including background and behavioural characteristics, were used to predict HIV status for women and men separately. Where individual interviews were not carried out, information from the household questionnaire was used to predict HIV status. The model parameters were then applied to the Lilongwe sample to predict HIV status.

The resulting predictions, or adjusted HIV rates, for Lilongwe are substantially higher than the observed prevalence. For women, the observed HIV prevalence of 1.6 percent is raised to 11.5 percent by the adjustment (Table 12.5). For men, the observed rate of 5.5 percent is increased to 9.2 percent. The resulting adjusted figures for Lilongwe are much closer to the expected HIV levels based on the ANC sentinel surveillance results. In addition, the adjusted prevalence for women and men in Lilongwe are consistent with the patterns by sex observed in other districts and regions in Malawi.

Table 12.5 Observed and adjusted HIV prevalence		
Observed and adjusted HIV prevalence among women and men age 15-49, Malawi 2004		
Geographic area	Observed prevalence	Adjusted prevalence
WOMEN		
Malawi, excluding Lilongwe	15.1	14.8
Lilongwe	1.6	11.5
Malawi total	13.3	14.4
MEN		
Malawi, excluding Lilongwe	11.1	11.2
Lilongwe	5.5	9.2
Malawi total	10.2	10.8
TOTAL		
Malawi, excluding Lilongwe	13.2	13.1
Lilongwe	3.7	10.3
Malawi total	11.8	12.7

Because nonresponse for HIV testing may bias the results, HIV prevalence rates among non-tested women and men in the rest of Malawi were predicted using the same multivariate statistical models. The results of this analysis, including the above adjustment for Lilongwe, show that the

adjusted HIV prevalence rates among non-tested women (12 percent) and men (10 percent) are similar to the observed national prevalence rates among tested women and men (13 percent and 10 percent, respectively). Adjusting the observed prevalence rates to account for those non-tested women and men makes little difference to the observed national rates. The adjusted HIV prevalence rates for all eligible women and men are 14 percent and 11 percent, respectively, which are well within the error margins of the observed prevalence rates based on tested respondents. A detailed description of the methodology and adjusted estimates by background characteristics is presented in Appendix G.

12.2.3 HIV Prevalence by Other Sociodemographic Characteristics

Table 12.6 shows the HIV prevalence by other sociodemographic characteristics. As expected, marital status is related to HIV infection. Women who are no longer in union (widowed and divorced or separated) have significantly higher rates (37 and 26 percent, respectively), while women who have never been in a marital union have the lowest prevalence (5 percent). The type of

Sociodemographic characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Marital status						
Currently in union	12.5	1,990	14.1	1,588	13.2	3,578
Widowed	37.4	91	*	12	35.6	103
Divorced/separated	25.5	209	16.0	64	23.3	272
Never in union	5.3	396	1.8	802	3.0	1,198
Ever had sex	10.0	149	1.8	536	3.6	684
Never had sex	2.5	247	1.8	266	2.2	513
Type of union						
In polygynous union	16.4	373	10.4	157	14.6	529
Not in polygynous union	11.6	1,615	14.5	1,431	13.0	3,046
Not currently in union	15.5	695	3.1	877	8.6	1,573
Currently pregnant						
Pregnant	9.8	362	na	na	na	na
Not pregnant/not sure	13.9	2,323	na	na	na	na
Births in the past 3 years¹						
None	16.5	1,282	na	na	na	na
Birth and ANC	10.5	1,321	na	na	na	na
Birth and no ANC	7.6	83	na	na	na	na
Circumcision status						
Circumcised	na	na	13.2	502	na	na
Not circumcised	na	na	9.5	1,963	na	na
Number of times slept away						
None	na	na	9.2	1,567	na	na
1-2	na	na	10.2	431	na	na
3-4	na	na	9.2	216	na	na
5+	na	na	17.9	245	na	na
Away for more than one month						
Away for more than 1 month	na	na	13.2	307	na	na
Away always for < 1 month	na	na	11.4	583	na	na
Never away	na	na	9.2	1,567	na	na
Total	13.3	2,686	10.2	2,465	11.8	5,150

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. Total includes some men with missing information on away for one month.
na = Not applicable
¹ None = no births, Birth and ANC = ANC for any birth, Births no ANC = No ANC for any of the births.

union women are in is associated with their risk of infection. Women who are in a polygynous union have higher HIV prevalence (16 percent) than those who are in a monogamous union (12 percent). It should be noted that the practice of polygyny is associated with specific ethnic groups and cultures. HIV prevalence among men also varies by marital status. Men who are divorced or separated have higher infection rates than married men. Men who have never been in a union have a much lower prevalence rate of 2 percent. HIV prevalence among pregnant women is lower than that for non-pregnant women (10 percent compared with 14 percent). Two percent of respondents (3 percent of women and 2 percent of men) who have never had sex were found to be HIV positive. This suggests either misreporting of sexual behaviour or non-sexual transmission of HIV.

The relationship between HIV prevalence and circumcision status is not in the expected direction. In Malawi, circumcised men have a slightly higher HIV infection rate than men who were not circumcised (13 percent compared with 10 percent). In Malawi, the majority of men are not circumcised (80 percent). The practice of circumcision varies greatly across ethnicity, ranging from 82 percent among the Yao and 30 percent among the Lomwe to 2 percent among the Tumbuka (see Chapter 11). As in Table 12.4, ethnicity is also significantly associated with HIV infection. It is interesting to note that women and men in ethnic groups with high proportion of circumcision such as Yao and Lomwe, the prevalence of HIV infection is also high. For example, 20 percent of Lomwe women and 18 percent of Lomwe men as well as 18 percent of Yao women and 12 percent of Yao men are HIV positive. While Ngoni men are not customarily circumcised, they also have a higher prevalence compared with other ethnic groups (15 percent). These observations suggest that the relationship between circumcision and HIV sero status is not straightforward. Further analysis is needed to determine the relationship between male circumcision and the risk of HIV infection.

In the 2004 MDHS, male respondents were asked whether they spent any time in past 12 months away from home, and in the same time period, whether they were away from home for more than one month. The survey results show that in general, men who stayed home have the lowest HIV prevalence. Men who were away from home for more than one month have a higher risk (13 percent) of HIV infection than those who were away for less than one month at a time (11 percent).

12.2.4 HIV Prevalence by Other Sociodemographic Characteristics

Table 12.7 examines the prevalence of HIV infection by sexual behaviour indicators among respondents who have ever had sexual intercourse. In reviewing these results, it is important to remember that responses about sexual risk behaviours may be subject to reporting bias. Also, sexual behaviour in the 12 months preceding the survey may not adequately reflect lifetime sexual risk.

For women, there is a clear pattern of higher HIV prevalence with earlier sexual debut. Women who started having sex at an early age (before age 15) have higher HIV prevalence than those with a later sexual debut (18 percent compared with 15 percent or lower). This pattern is not evident among men.

Having a higher-risk sexual partner (non-marital, non-cohabiting partner) in the 12 months preceding the survey increases the risk of infection. Twenty-two percent of women who had higher risk sex are HIV infected compared with 12 percent of women who are sexually active but did not have a higher risk partner. In contrast, men reporting a higher-risk partner in the past year have a similar HIV prevalence to sexually active men who did not have a higher-risk partner (9 and

11 percent, respectively). Women who did not have sex in the past year have a much higher prevalence than men in the same situation (21 percent compared with 8 percent).

Table 12.7 HIV prevalence by sexual behaviour characteristics

Percentage HIV positive among women and men age 15-49 who ever had sex and were tested for HIV, by sexual behaviour characteristics, Malawi 2004

Sexual behaviour characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age at first sex						
< 15	18.0	462	11.7	270	15.6	732
15-17	14.2	1,063	10.3	841	12.5	1,904
18-19	12.6	472	14.1	508	13.4	981
20+	14.6	199	9.2	539	10.7	739
Higher-risk sex in past 12 months¹						
Had higher-risk sex	21.9	171	9.1	488	12.4	659
Had sex, not higher-risk sex	12.8	1,982	12.5	1,470	12.7	3,452
No sex in past 12 months	21.0	284	7.9	241	15.0	525
Number of partners in past 12 months						
0	21.0	284	7.9	241	15.0	525
1	13.3	2,135	11.0	1,713	12.3	3,849
2	*	18	17.3	210	19.4	227
3+	*	0	(4.4)	31	(4.3)	31
Number of higher-risk partners in past 12 months						
0	13.9	2,266	11.9	1,708	13.0	3,974
1	19.6	162	10.1	408	12.8	570
2	*	10	3.0	60	10.7	69
3+	*	0	*	20	*	20
Paid for sex						
In past 12 months	na	na	11.3	123	na	na
Prior to past 12 months	na	na	17.7	343	na	na
Never	na	na	9.9	1,733	na	na
Any condom use						
Ever used condom	15.4	263	13.8	1,033	14.2	1,296
Never used condom	14.6	1,999	8.9	1,113	12.6	3,112
Never heard of condom	10.3	171	9.7	52	10.2	223
Total	14.4	2,438	11.2	2,199	12.9	4,636

Note: Figures in parentheses are based on 25-49 cases. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed. Total includes respondents with missing information on sexual behaviour.
na = Not applicable
¹ Sex with a person who is neither married to nor lives with the respondent.

Men who paid for sex in the period prior to the 12 months preceding the survey have a higher HIV prevalence (18 percent) than either those who have never paid for sex (10 percent) or those who paid for sex in the past 12 months (11 percent).

Condom use does not make much difference in the likelihood of a woman being infected with HIV. HIV prevalence among women who said that they never used a condom and those who used a condom at some time is 15 percent each. In contrast, men who never used a condom have a lower prevalence of HIV than those who did use a condom at some time (9 and 14 percent, respectively).

Some of the results discussed above demonstrate an inconsistent relationship between sexual behaviour and HIV prevalence. Detailed analysis is required to thoroughly examine this relationship, since it may be complicated by confounding factors such as age, residence, socioeconomic status, and cultural background that are associated with both the behavioural measures and HIV prevalence.

12.2.5 HIV Prevalence by Other Characteristics Related to HIV Risk

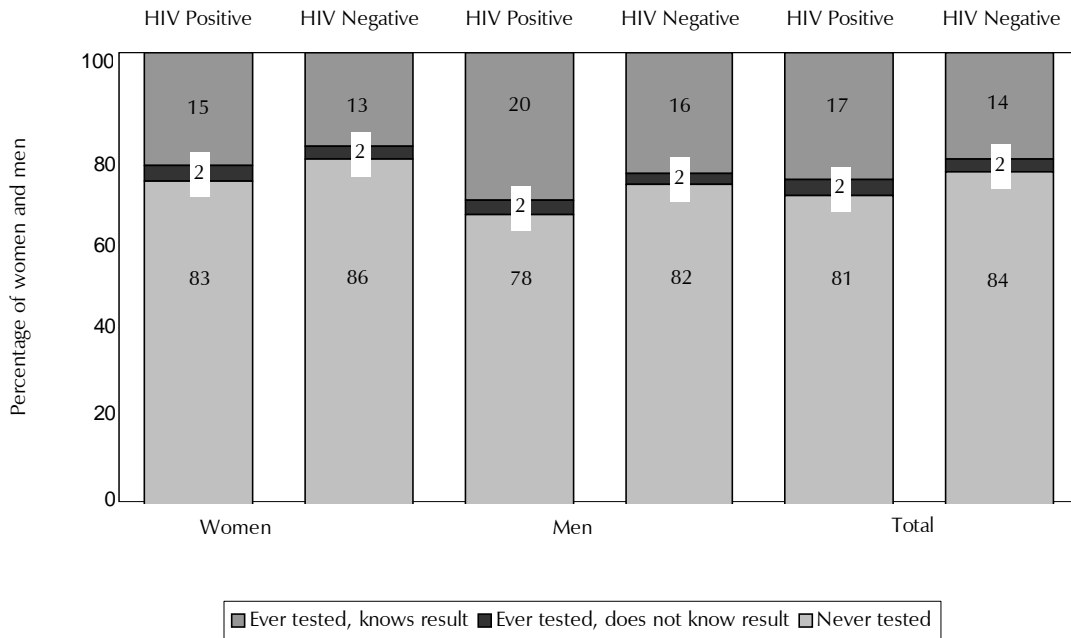
Table 12.8 presents HIV prevalence by other characteristics related to HIV risk among men and women who have ever had sex. As expected, women and men with a history of a sexually transmitted infections (STIs) or STI symptoms have much higher rates of HIV infection than those with none. Women and men with STIs are twice as likely to be HIV positive as those who have no STI. For example, 26 percent of women who report having an STI or symptoms of an STI are HIV positive, compared with 13 percent of women who did not have an STI or STI symptoms.

Other characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Sexually transmitted infection						
Had STI or STI symptom	25.6	224	20.0	129	23.6	353
No STI, no symptoms	13.3	2,214	10.7	2,070	12.0	4,283
HIV testing status						
Ever tested	16.5	374	12.6	424	14.4	798
Never tested	14.1	2,064	10.9	1,774	12.6	3,838
Total	14.4	2,438	11.2	2,199	12.9	4,636

The uptake of HIV testing in Malawi remains below 25 percent in the adult population and data on HIV testing indicate that the most common reasons for seeking testing is concern regarding infection risk and illness (MACRO, 2004). As might be expected from this finding, women and men who have been tested for HIV have higher rates of HIV infection than those who have never been tested. For example, 13 percent of men who have been tested for HIV are HIV positive, compared with 11 percent of men who have never been tested.

Although the individual's HIV status is associated with prior HIV testing, the results in Figure 12.2 show that four of five of those infected with HIV (85 percent of infected women and 80 percent of infected men) do not know their HIV status, either because they were never tested or, to a small extent, because they were tested and did not receive their results. Men are more likely than women to know their sero status. This is particularly true for HIV-positive individuals.

Figure 12.2 HIV Prevalence by Prior Testing Status



12.2.6 HIV Prevalence among Youth

Table 12.9 presents HIV prevalence among youth by background characteristics. Young people living with HIV are more likely to have been more recently infected compared with adults. Consequently, statistics on variation of HIV prevalence among youth is critical in understanding the patterns of recent HIV infections. HIV prevalence among younger people does not reflect the cumulative burden of AIDS because it does not take into account AIDS-related mortality in the general population.

Overall, 6 percent of youth are infected with HIV. Prevalence of HIV is more than four times higher among young women than among young men (9 percent compared with 2 percent). Youths in the Southern Region have the highest HIV prevalence compared with those in the Northern and Central Regions (9 percent compared with 6 and 3 percent, respectively).

HIV prevalence in youth in the urban areas is similar to that in rural areas (7 and 6 percent, respectively). In the past seven years, HIV prevalence in urban areas was estimated to be substantially higher than in rural areas (NAC, 2004b). The 2004 MDHS result suggests that incidence of HIV in rural areas has reached that in urban areas. The highest HIV prevalence among young women is found among women in the urban areas, in the Southern Region, and women who are divorced or separated. Prevalence is consistently higher among female youth compared with that among male youth.

Table 12.9 HIV prevalence among young people
Percentage HIV positive among women and men age 15-24 who were tested for HIV, by background characteristics, Malawi 2004

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age						
15-19	3.7	500	0.4	467	2.1	967
15-17	1.3	263	0.7	267	1.0	530
18-19	6.3	237	0.0	200	3.4	438
20-24	13.2	661	3.9	442	9.5	1,103
20-22	11.2	427	4.2	258	8.5	684
23-24	16.8	235	3.4	185	10.9	419
Marital status						
Currently in union	10.4	714	5.5	202	9.4	916
Widowed	*	5	*	0	*	5
Divorced/separated	18.8	68	*	25	13.7	93
Never in union	4.8	375	1.2	682	2.4	1,057
Ever had sex	8.9	131	0.7	432	2.6	563
Never had sex	2.5	243	2.0	250	2.2	494
Residence						
Urban	13.3	205	0.3	183	7.2	388
Rural	8.2	957	2.5	726	5.8	1,683
Region						
Northern	9.0	205	0.7	150	5.5	355
Central	3.9	431	1.2	325	2.7	756
Southern	13.4	525	3.2	435	8.8	960
Number of partners in past 12 months						
0	4.3	338	1.5	408	2.7	746
1	10.6	812	2.3	425	7.7	1,237
2+	*	12	4.3	77	10.1	88
Number of higher-risk partners in past 12 months						
0	8.5	1,050	2.3	595	6.3	1,644
1	11.4	105	2.0	258	4.8	363
2+	*	7	0.0	56	7.2	63
Total	9.1	1,161	2.1	910	6.0	2,071

Note: An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.

The high prevalence among youth who are in a union (9 percent) compared with those who have never been in a union (2 percent) indicates that early marriages may be linked to early sexual debut and other risks.

HIV prevalence increases with increasing number of sexual partners in the past 12 months. Women and men who report having two or more partners are more likely to be HIV positive than those who had only one partner in the past 12 months (10 and 7 percent, respectively). For women and men who have higher-risk sex, the corresponding proportions are 7 and 5 percent, respectively.

12.2.7 HIV Prevalence among Couples

Among the 1,324 cohabiting couples who were tested for HIV in the 2004 MDHS, for 83 percent both partners are HIV negative and for 7 percent both partners are HIV positive. Ten percent of the couples are discordant, that is, one partner is infected and the other not (Table 12.10). The variations in the level of HIV infection of both partners by background characteristics generally conform to the patterns observed in the variations in women's seroprevalence rates. Infection rates are highest among couples in urban areas and in the Southern Region, and among those with higher education and in the higher wealth quintiles.

Table 12.10 HIV prevalence among couples

Among cohabiting couples who were tested, percent distribution by results of HIV testing, according to background characteristics, Malawi 2004

Background characteristic	Both partners positive	Man positive, woman negative	Woman positive, man negative	Both partners HIV negative	Total	Number
Woman's age						
15-19	3.1	2.4	2.7	91.8	100.0	126
20-29	7.1	5.5	4.1	83.3	100.0	658
30-39	9.4	8.2	4.7	77.7	100.0	380
40-49	4.1	3.5	2.9	89.5	100.0	159
Man's age						
15-19	*	*	*	*	100.0	9
20-29	4.4	4.0	2.5	89.2	100.0	460
30-39	9.7	6.4	5.5	78.4	100.0	460
40-54	7.1	7.0	3.8	82.1	100.0	395
Marital status						
Married	6.9	5.8	3.9	83.4	100.0	1,243
Living together	9.4	4.9	5.2	80.5	100.0	80
Type of union						
Monogamous	7.1	5.7	4.0	83.2	100.0	1,157
Polygynous	6.4	5.8	4.2	83.6	100.0	167
Residence						
Urban	14.6	13.8	4.5	67.0	100.0	151
Rural	6.0	4.7	3.9	85.3	100.0	1,173
Region						
Northern	2.1	4.8	1.7	91.4	100.0	170
Central	3.6	2.8	1.7	91.9	100.0	565
Southern	11.7	8.8	6.9	72.6	100.0	589
Woman's education						
No education	5.0	6.2	3.0	85.7	100.0	377
Primary 1-4	6.0	4.9	4.5	84.6	100.0	394
Primary 5-8	9.3	4.7	5.2	80.8	100.0	440
Secondary+	8.5	10.8	0.9	79.9	100.0	113
Man's education						
No education	4.5	6.9	4.3	84.3	100.0	199
Primary 1-4	6.2	2.1	4.6	87.2	100.0	354
Primary 5-8	7.3	5.8	4.8	82.0	100.0	505
Secondary+	9.5	9.5	1.6	79.4	100.0	264
Wealth quintile						
Lowest	3.6	1.5	2.1	92.8	100.0	164
Second	3.2	3.1	3.9	89.8	100.0	315
Middle	7.4	6.8	5.5	80.3	100.0	340
Fourth	9.8	5.7	4.0	80.5	100.0	331
Highest	11.2	12.5	3.0	73.3	100.0	173
Total	7.0	5.7	4.0	83.3	100.0	1,324

Note: An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.

Looking more specifically at discordant couples, in 6 percent of couples, the man is infected and the woman uninfected, while in 4 percent of couples, the woman is infected and the man is not. The fact that there are more couples with discordant HIV status than couples where both partners are infected represents an unmet need for HIV prevention, because the vast majority of these couples may not know each other's HIV status. Couple-oriented voluntary counselling and testing (VCT) services, where partners (including those in polygynous marriages) go together and receive results together, are available in some locations in the country, but couples attend as clients in only a few VCT centres.

12.3 Measuring the HIV Burden in Malawi

The inclusion of HIV testing in the 2004 MDHS provides the basis for a more precise estimate of the burden of HIV in Malawi and permits the calibration of estimates of HIV prevalence based on sentinel surveillance in pregnant women. Malawi has a heterogeneous HIV epidemic, with significant differences in the disease burden by region and ethnicity.

The linkage of biological and behavioural data in this survey has strengthened the validity of this survey for allowing multivariate analyses. The measurement of HIV prevalence in the 2004 MDHS should prove useful in calibrating HIV prevalence estimates of the general population from sentinel surveillance in pregnant women.

This link between HIV test results and demographic and behavioural data also enhances the understanding of the distribution, patterns, and risk factors for HIV in Malawi, with the potential for improved planning and implementation of programs as a result of this information. Finally, the prevalence of couples that are discordant for HIV underscores the need for knowledge of both one's own HIV status and that of one's partner to prevent the continued spread of HIV. Subsequently, some positive changes in behaviour, especially among men, have been observed and documented (NAC, 2004b).

Sri Poedjastoeti and Ann Phoya

In an earlier chapter of this report, estimates of mortality during the first years of life were presented and discussed. Early childhood mortality varies substantially as an index of social and economic development and thus tends to be predictably high in disadvantaged settings. Mortality during later childhood and adolescence is, on the other hand, relatively low in all societies but begins to rise with age starting in the late teenage years. The pattern and pace of the rise in adult mortality with increasing age is tied closely to the occupational profile, fertility pattern, and epidemiological characteristics of a population. Two aspects of adult mortality dynamics deserve close attention. First, given sharp rises in the prevalence of HIV infection and AIDS (discussed in the previous chapter) over the last 20 years, Malawi is expected to suffer increases in both female and male adult mortality in the near term. Second, mortality related to pregnancy and childbearing (maternal mortality) serves as an important indicator to monitor women's and reproductive health programmes in the country.

In the 2000 Malawi Demographic and Health Survey (MDHS), data were collected on adult and maternal mortality. Similar data were collected in the 2004 MDHS, allowing estimation of adult and maternal mortality using a direct estimation procedure. The basis for the calculation of the mortality rates is the survivorship of all live births to the respondent's natural mother (i.e., the respondent's brothers and sisters). The direct approach to estimating adult and maternal mortality maximise use of the available data, including information on the age of surviving siblings, the age at death of siblings who died, and the number of years ago the sibling died. The data are aggregated for determining the number of person-years of exposure to mortality risk and the number of sibling deaths occurring in defined calendar periods. Rates of maternal and adult mortality are obtained by dividing maternal (or all female or male adult) deaths by person-years of exposure (Rutenberg and Sullivan, 1991). The procedure calculates rates in each of the five-year age groups, then aggregates the estimates for the whole age 15-49 range, weighting the age-specific estimates using the observed age structure of the female population.

13.1 DATA

Each female respondent in the 2004 MDHS was first asked to give the total number of her mother's live births. Then she was asked to report how many siblings were born ahead of her. Then, she was asked to provide a list of the children born to her mother, starting with the first born and including whether or not each sibling was still alive at the survey date. For living siblings, current age was collected; for deceased siblings, age at death and years since death were collected. Interviewers were instructed to accept approximate answers when a respondent could not provide precise information on ages or years ago. For sisters who died at age 10 years or older, three questions were used to determine if the death was maternity related: "Was [NAME OF SISTER] pregnant when she died?" and if negative, "Did she die during childbirth?" and if negative, "Did she die within six weeks of the birth of a child or pregnancy termination?"

The estimation of adult and maternal mortality requires reasonably accurate reporting of the number of sisters and brothers the respondent ever had, the number who died, and (for maternal mortality) the number of sisters who died of maternity-related causes. Table 13.1 shows the number of siblings reported by the respondents and the completeness of the reported data on current age, age at death, and years since death.

The sex ratio of respondents' siblings (the ratio of brothers to sisters) is 1.01, which is slightly lower than the expected value of 1.02 or 1.03. MDHS respondents are highly knowledgeable about the survival status of their brothers and sisters, with only 16 out of 62,733 siblings missing this information. They also tend to know the ages of their surviving siblings, with only 0.2 percent of siblings missing this information. Respondents are also able to report the age at death or years since death for their deceased siblings: 98 percent of deceased siblings have both age at death and years since death reported and less than 2 percent are missing years since death or age at death or both. Rather than exclude the siblings with missing data from further analysis, information on the birth order of siblings, in conjunction with other information, was used to impute the missing data.¹ The sibling survivorship data, including cases with imputed values, were used in the direct estimation of adult and maternal mortality.

Sibling status and completeness of reporting	Sisters		Brothers		Total	
	Number	Percent	Number	Percent	Number	Percent
All siblings	31,195	100.0	31,538	100.0	62,733	100.0
Surviving	24,256	77.8	24,429	77.5	48,686	77.6
Deceased	6,932	22.2	7,099	22.5	14,031	22.4
Missing information	6	0.0	10	0.0	16	0.0
Living siblings	24,256	100.0	24,429	100.0	48,686	100.0
Age reported	24,217	99.8	24,366	99.7	48,583	99.8
Age missing	39	0.2	64	0.3	103	0.2
Dead siblings	6,932	100.0	7,099	100.0	14,031	100.0
AD and YSD reported	6,817	98.3	6,959	98.0	13,777	98.2
Missing only AD	57	0.8	44	0.6	101	0.7
Missing only YSD	23	0.3	28	0.4	50	0.4
Missing both	36	0.5	67	0.9	103	0.7

AD = Age at death
YSD = Years since death

¹ The imputation procedure is based on the assumption that the reported birth order of siblings in the history is correct. The first step is to calculate birth dates. For each living sibling with a reported age and for each dead sibling with complete information on both age at death and years since death, the birth date was calculated. For a sibling missing these data, a birth date was imputed within the range defined by the birth dates of the bracketing siblings. In the case of living siblings, an age was then calculated from the imputed birth date. In the case of dead siblings, if either the age at death or years since death was reported, that information was combined with the birth date to produce the missing information. If both pieces of information were missing, the distribution of the age at death for siblings for whom years since death was unreported, but age at death was reported, was used as a basis for imputing the age at death.

13.2 DIRECT ESTIMATES OF ADULT MORTALITY

Another way to assess the quality of data used to estimate maternal mortality is to evaluate the plausibility of the adult mortality rates obtained. If the overall adult mortality rates display a generally stable, plausible pattern, it lends credence to the maternal mortality estimates. This is because maternal mortality is a subset of adult mortality.

Table 13.2 shows age-specific mortality rates for men and women age 15-49, for the calendar period 0-6 years before the survey, such as the 7-year period before the interview, which roughly corresponds to 1998-2004. Age-specific death rates are computed by dividing the number of deaths in each age group by the total person-months of exposure in that age group during a specified reference period. Since the number of deaths on which the rates are based is not large (in the 2004 MDHS they are 1,376 female and 1,193 male deaths), the age-specific rates are subject to large sampling variation. Also shown are identically calculated estimates drawn from the 1992 MDHS and the 2000 MDHS, for the same period before those surveys. The reference periods for the earlier surveys is 1986-1992 and 1994-2000, respectively. The centre of the reference period of the estimates from the three surveys are early 1989, early 1997, and mid-2001, respectively.

Table 13.2 Adult mortality rates					
Direct estimates of age-specific mortality rates for women and men age 15-49, for the periods 0-6 years prior to the 2004 MDHS and 2000 MDHS					
Age	2004 MDHS			2000 MDHS	1992 MDHS
	Deaths	Exposure (person years)	Mortality rate/1000	Mortality rate/1000	Mortality rate/1000
WOMEN					
15-19	117	27,622	4.2	4.1	5.3
20-24	227	29,331	7.7	8.6	3.6
25-29	299	23,763	12.6	11.4	6.8
30-34	245	17,228	14.2	15.5	7.2
35-39	230	12,206	18.9	17.1	9.0
40-44	177	7,892	22.5	17.9	8.9
45-49	82	4,574	17.9	18.7	9.6
15-49	1,376	122,616	11.6	11.3	6.5
MEN					
15-19	118	27,675	4.2	3.4	3.8
20-24	143	28,966	4.9	5.9	4.1
25-29	178	24,514	7.3	9.1	6.8
30-34	258	17,404	14.8	14.4	8.4
35-39	204	11,992	17.0	20.3	7.6
40-44	178	7,579	23.5	22.5	10.1
45-49	115	4,560	25.2	23.2	9.7
15-49	1,193	122,690	10.5	11.1	6.3

Data in Table 13.2 show that there was an increase in adult mortality from early 1989 to early 1997. However, mortality for both women and men has remained at the same levels since 1997 (Figure 13.1 and Figure 13.2).

Figure 13.1 Trends in Age-specific Mortality among Women Age 15-49

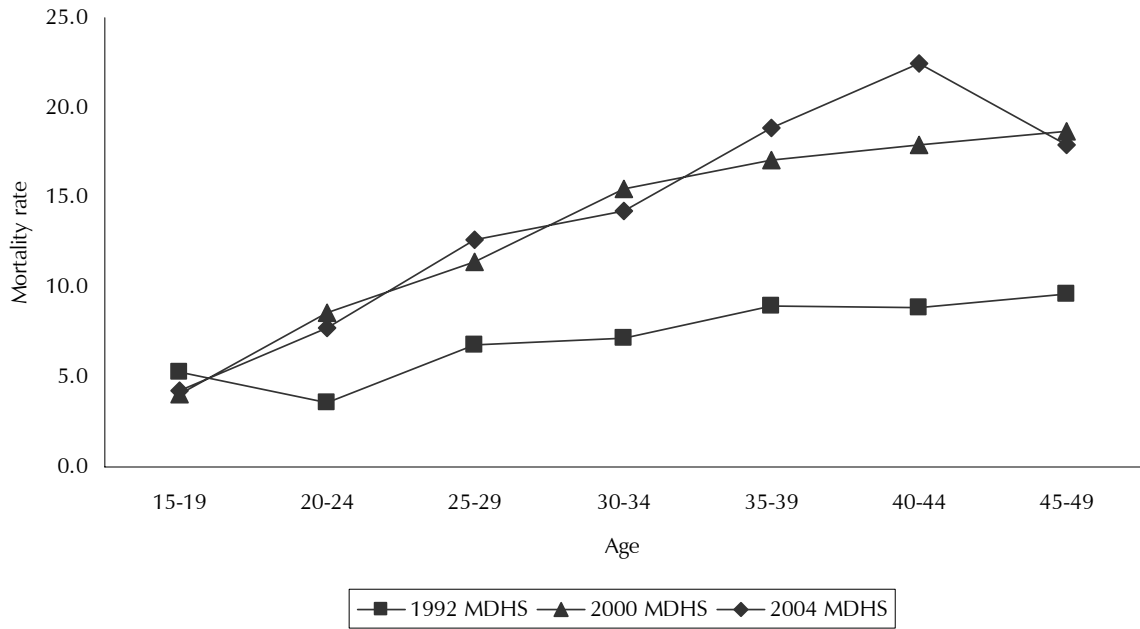
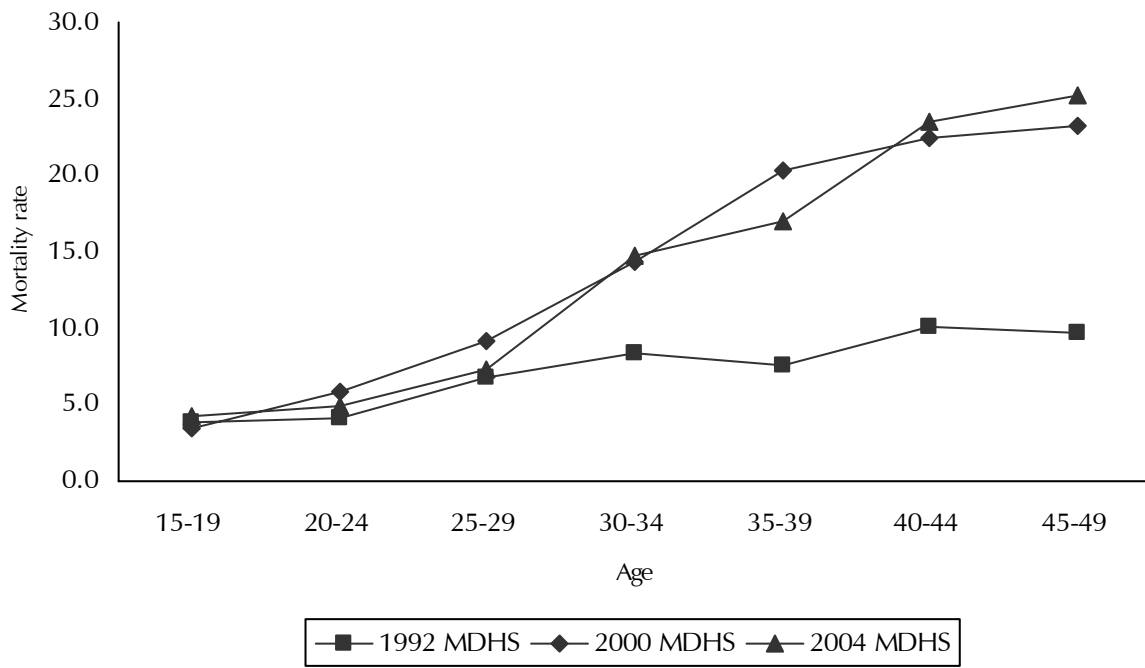


Figure 13.2 Trends in Age-specific Mortality among Men Age 15-49



13.3 MATERNAL MORTALITY

Maternal deaths are defined as any death that occurred during pregnancy, childbirth, or within two months after the birth or termination of a pregnancy.² Estimates of maternal mortality are therefore based solely on the timing of the death in relationship with pregnancy and childbearing.

Two survey methods are generally used to estimate maternal mortality in developing countries: the sisterhood method (Graham et al., 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan, 1991). The approach used to obtain the maternal mortality results in this report is the same as that used to obtain overall adult mortality. Age-specific mortality rates are calculated by dividing the number of maternal deaths by woman-years of exposure. The number of maternal deaths (240) is small, so age-specific rates are subject to very large sampling errors and should be interpreted with caution. The preferred approach is to calculate one estimate for all childbearing ages (15-49 years).

To remove the effect of truncation bias in the upper age limit (the upper boundary for eligibility for individual interview for women in the MDHS is 49 years), the overall rate for women age 15-49 is standardized by the age distribution of the survey respondents. Direct age-specific estimates of maternal mortality from the reported sibling survivorship histories are shown in Table 13.3 for the period 0-6 years before the survey, alongside estimates based on the 1992 MDHS and the 2000 MDHS data for the period 0-6 years before that survey. The proportion of all female deaths that are maternity-related in the 7-year period prior to 2004 (approximately 1998-2004) is 17 percent. This proportion is lower than that recorded in the 1992 MDHS (21 percent) and the

Age group	2004 MDHS			2000 MDHS	1992 MDHS
	Deaths	Exposure (person years)	Mortality rate/1000	Mortality rate/1000	Mortality rate/1000
15-19	8	27,622	0.3	0.4	1.3
20-24	52	29,331	1.8	2.4	0.5
25-29	64	23,763	2.7	2.7	1.5
30-34	50	17,228	2.9	3.7	1.8
35-39	33	12,206	2.7	2.9	1.9
40-44	22	7,892	2.8	4.5	0.8
45-49	12	4,574	2.7	1.9	3.4
15-49	240	122,616	2.0	2.4	1.4
General fertility rate (GFR)			0.204	0.210	0.220
Maternal mortality ratio (MMR) ¹			984	1,120	620

¹ Per 100,000 live births, calculated as the maternal mortality rate divided by the general fertility rate.

² This time-dependent definition includes all deaths that occurred during pregnancy and two months after pregnancy, even if the death was due to nonmaternal causes. However, this definition is unlikely to result in overreporting of maternal deaths because most deaths to women during the two-month period are due to maternal causes. And maternal deaths are more likely to be underreported than overreported.

2000 MDHS (22 percent).³ At face value, this means that maternal mortality changes at a slightly faster pace than nonmaternal mortality.

The maternal mortality rate is converted to a maternal mortality ratio (MMR) and expressed per 100,000 live births by dividing the rate by the general fertility rate (0.204) associated with the same period. In this way, the obstetrical risk of pregnancy and childbearing is underlined. Using direct estimation procedures based on the 2004 MDHS survey, the maternal mortality ratio is estimated to be 984 maternal deaths per 100,000 live births applicable to the seven-year period before the survey (centred in mid-2001). As in the case of adult mortality, the MMR based on the 2000 MDHS is significantly higher than that calculated from the 1992 MDHS. However, the estimated MMR based on the 2004 MDHS data is lower than the rate from the 2000 MDHS survey of 1,120 maternal deaths per 100,000 live births. It is unlikely that maternal mortality has gone up and then down again so dramatically, especially since the reference periods for the estimates overlap each other. Maternal mortality ratios measured in this way are subject to very high sampling errors and cannot adequately indicate trends over the short term.

³ These proportionate maternal mortality estimates are in the range of those presented by Stanton et al. (1997) in their exhaustive review of similar data collected around the world.

Storn Kabuluzi

Malaria is a major public health problem in Malawi. It is the leading cause of morbidity and mortality, especially among children under the age of five years and pregnant women. The Ministry of Health (MOH) estimates that over the past five years there have been more than 8 million episodes of malaria per year throughout the country (MOHP, 2003a). Malaria accounts for 40 percent of all outpatient visits to health facilities in the country. Anaemia, most of which is considered to be attributable to malaria, is estimated to be responsible for about 40 percent of all hospitalisations and 40 percent of all hospital deaths in children under age five.

Over 85 percent of malaria infections in Malawi are due to *Plasmodium falciparum*. This type of malaria can lead to death; however, the most severe cases are typically limited to those who are not immune or have low immunity. Those most at risk are children age three months to five years, when they no longer have the immunity transferred from their mother, to the age when they have developed their own immunity. Also at risk are pregnant women because their natural immunity is reduced. Pregnant women are four times more likely to suffer from complications of malaria than non-pregnant women. Malaria is a cause of pregnancy loss, low birth weight, and neonatal mortality (Jamison et al., 1993).

In economic terms, malaria has both direct and indirect costs. Direct costs borne by individuals, households and government include the cost of treatment. The indirect costs of malaria include not only the negative economic impact of morbidity and mortality in work days lost in agriculture and industry, but also absenteeism in the education system, which further contributed to loss in productivity (MOHP, 2002b). Malaria therefore aggravates poverty.

The call for the Roll Back Malaria (RBM) initiative was made in 1998 by WHO as an international effort to control malaria. Malawi endorsed this initiative by committing herself to the Abuja Declaration. The RBM initiative is the framework within which the country implements malaria control activities. The initiative's goal is to halve the 2000 levels of malaria morbidity and mortality by 2010, and to reduce this malaria burden by a further 50 percent by 2015. The objectives of the initiative are to ensure that by the year 2005 at least 60 percent of those at risk of malaria, particularly pregnant women and children under five years of age, have access to the most suitable and affordable combination of personal and community protective measures such as insecticide-treated mosquito nets (ITNs) and prompt, effective treatment for malaria within 24 hours of onset of illness. Another objective is to ensure that at least 60 percent of all pregnant women who are at risk of malaria, especially those in their first pregnancies, have access to intermittent preventive treatment (IPT).

To control malaria, the Government of Malawi has put in place several strategies through the National Malaria Control Programme. The main strategic areas that have been identified for scaling-up of malaria control activities, include malaria case management, intermittent preventive treatment (IPT) of pregnant women with sulfadoxine-pyrimethamine (SP), and

malaria prevention with special emphasis on the use of insecticide-treated mosquito nets (ITNs) (MOHP, 2002a; MOH, 2005b).

14.1 MOSQUITO NETS

The use of ITNs is a primary health intervention to reduce malaria transmission. In an effort to make mosquito nets affordable, the Government of Malawi has since November 2002 introduced a subsidy on mosquito nets and developed ITN guidelines to standardise and facilitate the distribution of mosquito nets in the country. The Government and development partners supply mosquito nets and insecticide treatment kits for distribution at subsidised costs to communities. Mosquito nets in Malawi are distributed through three main distribution channels: health facilities, community organisations, and the private sector. Less than 10 percent of the nets are distributed through the commercial distribution channel. The nets distributed through health facilities and communities are green and rectangular. The nets for commercial distribution are blue and conical.

This section presents the 2004 MDHS findings collected at the household level on mosquito net possession and use of mosquito nets by household members, in particular children under five years of age and pregnant women.

14.1.1 Ownership of Mosquito Nets

All households in the 2004 MDHS survey were asked whether they own mosquito nets and, if so, how many they own. The respondents were asked to show the mosquito nets to the interviewer.

Table 14.1 shows the percentage of households with at least one mosquito net, with at least one ever-treated mosquito net, and the average number of nets per household, by background characteristics. The data show that 42 percent of households in Malawi have at least one net. Less than one-fifth of households (18 percent) have more than one net. Data in Table 14.1 also show that 34 percent of the households own at least one ever-treated mosquito net, and 15 percent of these households have more than one ever-treated net. Just over one-fourth (27 percent) of households own an ITN, that is, a net that has been soaked in insecticide within the past 12 months or a factory-treated net that does not require further treatment. Almost one in eight households have more than one ITN. The average number of mosquito nets per household is 0.7, while the average number of ever-treated mosquito nets per household is 0.6, The average number of ITNs per household is 0.4.

Urban households are more likely than rural households to own ITNs (41 percent compared with 25 percent). The Northern Region has the highest coverage of ITNs while the Central Region has the lowest coverage (31 percent compared with 24 percent). Among the oversampled districts, it is interesting to note that Salima and Machinga have the highest coverage of ITNs. The data also show that ownership of mosquito nets is directly related to the wealth status of the household; better off households are more likely than poorer households to own a mosquito net.

Table 14.1 Ownership of mosquito nets

Percentage of households with at least one and with more than one mosquito net (treated or untreated) and average number of mosquito nets per household, by background characteristics, Malawi 2004

Background characteristic	Percentage of households that have at least one net	Percentage of households that have more than one net	Average number of nets per household	Percentage of households with at least one ever-treated net	Percentage of households with more than one ever-treated net	Average number of ever-treated nets per household	Percentage of households that have at least one ITN	Percentage of households that have more than one ITN	Average number of ITNs per household	Number of households
Residence										
Urban	55.8	30.7	1.1	47.5	25.8	0.9	40.5	21.0	0.8	2,262
Rural	39.1	15.8	0.6	31.6	12.4	0.5	24.8	9.7	0.4	11,402
Region										
Northern	46.8	27.3	0.9	37.0	20.5	0.7	31.3	16.9	0.6	1,584
Central	38.5	16.1	0.6	30.8	12.8	0.5	24.0	9.8	0.4	5,589
Southern	43.6	17.9	0.7	36.5	14.9	0.6	29.4	11.8	0.5	6,491
District										
Blantyre	41.4	16.5	0.7	34.6	14.4	0.6	30.0	12.1	0.5	1,111
Kasungu	32.8	13.1	0.5	26.8	10.6	0.4	19.7	7.9	0.3	544
Machinga	63.8	27.9	1.0	53.0	22.7	0.8	43.4	19.7	0.7	539
Mangochi	56.6	28.1	1.0	44.0	22.3	0.8	34.8	16.4	0.6	727
Mzimba	37.7	19.8	0.7	31.4	16.1	0.6	25.4	12.9	0.5	795
Salima	62.2	26.1	1.0	55.4	22.9	0.9	42.7	17.4	0.7	392
Thyolo	31.8	10.7	0.5	25.5	8.2	0.4	20.9	6.7	0.3	734
Zomba	50.3	22.6	0.9	44.2	19.2	0.7	37.3	17.0	0.6	760
Lilongwe	42.9	18.2	0.7	33.0	14.6	0.5	26.4	11.4	0.4	2,127
Mulanje	29.7	10.6	0.5	25.4	8.8	0.4	21.7	7.6	0.3	611
Other districts	39.0	17.3	0.7	31.8	13.3	0.5	24.7	10.1	0.4	5,325
Wealth quintile										
Lowest	20.3	3.9	0.2	14.9	2.6	0.2	10.7	1.7	0.1	3,168
Second	31.6	9.3	0.4	24.4	7.2	0.3	18.5	5.3	0.2	2,748
Middle	39.1	14.2	0.6	31.4	10.9	0.5	24.8	8.9	0.4	2,622
Fourth	52.5	23.0	0.8	43.6	18.2	0.7	35.6	14.5	0.5	2,569
Highest	71.9	44.9	1.5	62.1	37.9	1.3	52.2	30.4	1.0	2,557
Total	41.9	18.2	0.7	34.2	14.7	0.6	27.4	11.6	0.4	13,664

¹An ever-treated net is (1) a pretreated net or a non-pretreated net that has subsequently been soaked with insecticide at any time.

²An Insecticide Treated Net (ITN) is (1) a factory treated net that does not require any further treatment or (2) a pretreated net obtained within the last six months or (3) a net that has been soaked with insecticide within the past six months.

14.1.2 Colour and Shape of Mosquito Nets

In the 2004 Malawi DHS, the respondents to the Household Questionnaire were asked to show their mosquito nets to the interviewers. To allow monitoring of the distribution of mosquito nets made available under social marketing initiatives, the interviewer also noted the colour, shape and condition of the net. Interviewers were instructed to record whether the net has holes that are the size of the tip of a thumb or larger.

Table 14.2 shows that one in four of the nets observed have holes. Green nets are the most popular; 74 percent of the nets observed are green. One in five observed nets is blue, and 5 percent are white. Rectangular nets are more common than conical nets (71 and 29 percent, respectively). The major net distribution effort in Malawi distributes green, rectangular nets

through health facilities and blue, conical nets through private sector channels. As anticipated by the net distribution strategy, these results show that rural residents are more likely to have green and rectangular nets while urban residents are more likely to have blue and conical nets.

Table 14.2 Colour and shape of mosquito nets

Percentage of households with an observed mosquito net, percentage of observed nets with holes, and percent distribution of observed nets by colour and shape, according to background characteristics, Malawi 2004

Background characteristic	Percentage of households with observed net	Number of households	Percentage of observed nets with at least one hole	Percentage of observed nets that are:				Percentage of observed nets that are:		Number of observed nets
				Blue	Green	White	Other	Conical	Rectangle	
Residence										
Urban	18.9	2,262	20.6	42.5	51.2	6.2	0.1	51.7	48.0	722
Rural	20.4	11,402	27.2	16.7	78.6	4.6	0.1	23.7	75.9	3,439
Region										
Northern	19.7	1,584	26.0	24.4	66.2	9.3	0.1	41.0	58.4	533
Central	17.2	5,589	27.6	20.8	74.6	4.5	0.2	26.8	73.0	1,416
Southern	22.8	6,491	25.0	20.6	75.3	4.0	0.0	26.8	72.9	2,212
District										
Blantyre	18.5	1,111	18.5	40.6	53.9	5.6	0.0	46.9	53.1	300
Kasungu	21.5	544	38.0	14.3	83.6	2.1	0.0	18.7	81.3	178
Machinga	36.7	539	26.6	9.4	84.8	5.7	0.0	15.9	83.6	299
Mangochi	24.2	727	41.5	22.3	72.8	4.9	0.0	29.6	70.4	308
Mzimba	19.6	795	26.8	26.3	65.9	7.5	0.2	46.6	52.6	280
Salima	32.4	392	44.2	34.9	57.0	7.6	0.6	47.3	52.7	186
Thyolo	18.4	734	29.5	14.0	84.1	2.0	0.0	15.9	83.4	185
Zomba	26.1	760	16.8	19.6	75.7	4.6	0.0	30.2	69.2	314
Lilongwe	13.0	2,127	15.0	30.2	66.7	3.1	0.0	28.3	71.1	389
Mulanje	17.9	611	21.7	15.6	79.3	5.0	0.0	26.0	73.6	165
Other districts	19.8	5,325	25.3	17.2	77.8	4.8	0.2	24.4	75.2	1,558
Wealth quintile										
Lowest	10.9	3,168	36.3	12.3	84.0	3.6	0.1	18.5	81.3	393
Second	16.6	2,748	31.2	12.6	83.9	3.2	0.2	17.6	82.1	600
Middle	21.7	2,622	28.1	12.9	83.6	3.4	0.0	17.8	81.5	813
Fourth	26.4	2,569	24.2	18.1	77.5	4.2	0.2	25.3	74.6	1,012
Highest	27.6	2,557	20.9	34.8	57.8	7.3	0.0	45.4	54.2	1,342
Total	20.2	13,664	26.0	21.2	73.9	4.8	0.1	28.6	71.1	4,161

Respondents in households which have no mosquito nets were asked their preference for colour and shape of net.

Figure 14.1 shows that there is about equal preference for blue (38 percent) and green (41 percent) nets. However, analysis of colour preference by residence reveals that urban residents tend to prefer blue nets while rural residents tend to prefer green nets. Figure 14.2 shows a similar parity in preference of net shape at the national level: 45 percent of household respondents prefer conical nets while 43 percent prefer rectangular nets. By residence, urban respondents are more likely to prefer conical nets while rural respondents prefer rectangular nets.

Figure 14.1 Preferred Colour of Mosquito Net among Households Without Mosquito Nets, by Residence

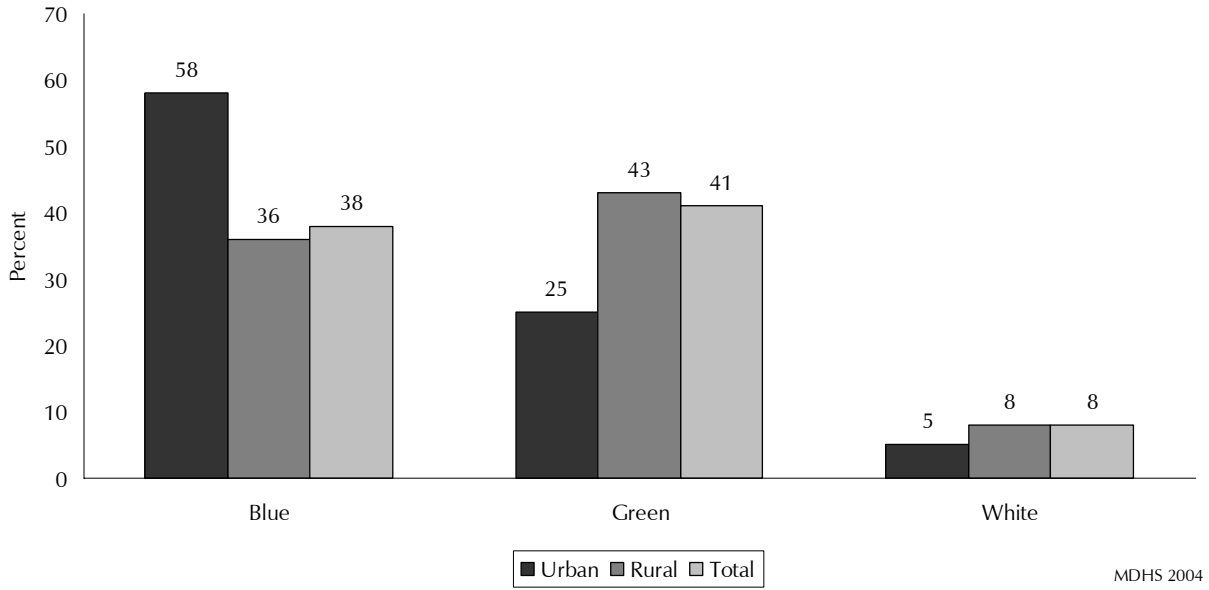
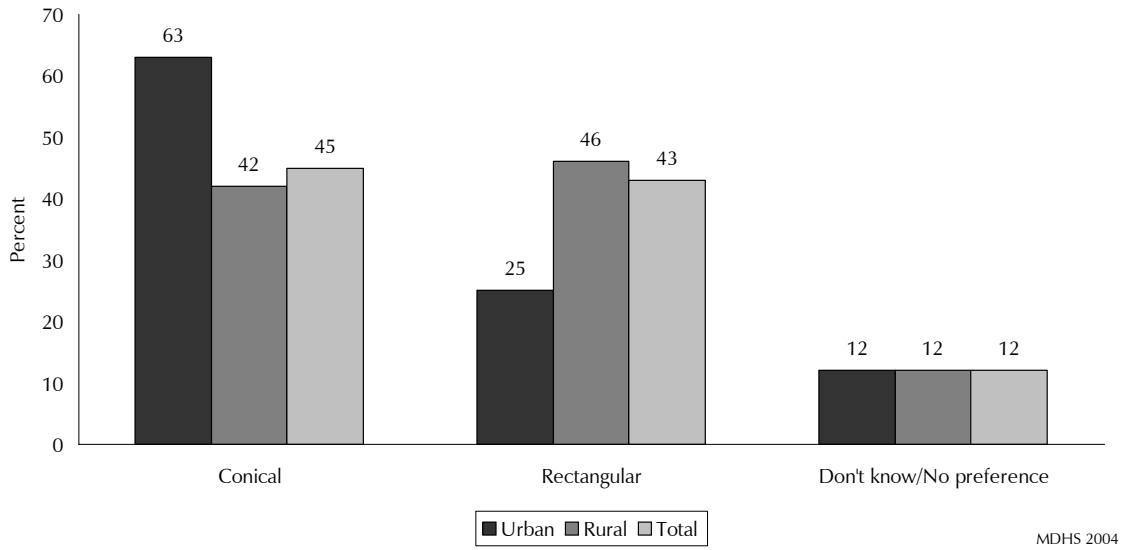


Figure 14.2 Preferred Shape of Mosquito Net among Households Without Mosquito Nets, by Residence



14.1.3 Use of Mosquito Nets by Children

In the 2004 Malawi DHS, respondents were asked if anyone slept under the mosquito nets they showed to the interviewers. This section analyses mosquito net usage among children. Because malaria is especially dangerous to children under five years of age, the malaria prevention strategies in Malawi have targeted children under age five.

Table 14.3 shows the percentage of children under age five years who slept under a mosquito net the night before the survey, by background characteristics. The data show that 20 percent of children under age five slept under a mosquito net, 18 percent slept under an ever-treated net, and 15 percent slept under an ITN. Older children are less likely than younger children to sleep under a bed net. There are no marked differences in mosquito net usage by sex of child. Urban children are much more likely to use a mosquito net than children in the rural areas. ITN usage by children under five in the Northern Region and Southern Region is higher than in the Central Region (17 percent compared with 12 percent). The proportion of children who slept under an ITN among the oversampled districts ranges from 29 percent in Salima to 6 percent in Kasungu. ITNs are more available in wealthier households (34 percent for the highest wealth quintile and 6 percent for the lowest wealth quintile).

While still below the Roll Back Malaria target of 60 percent of children under age five sleeping under an ITN, use of any mosquito net has more than doubled for children under five since the 2000 MDHS (8 percent) (Figure 14.3).

Table 14.3 Use of mosquito nets by children

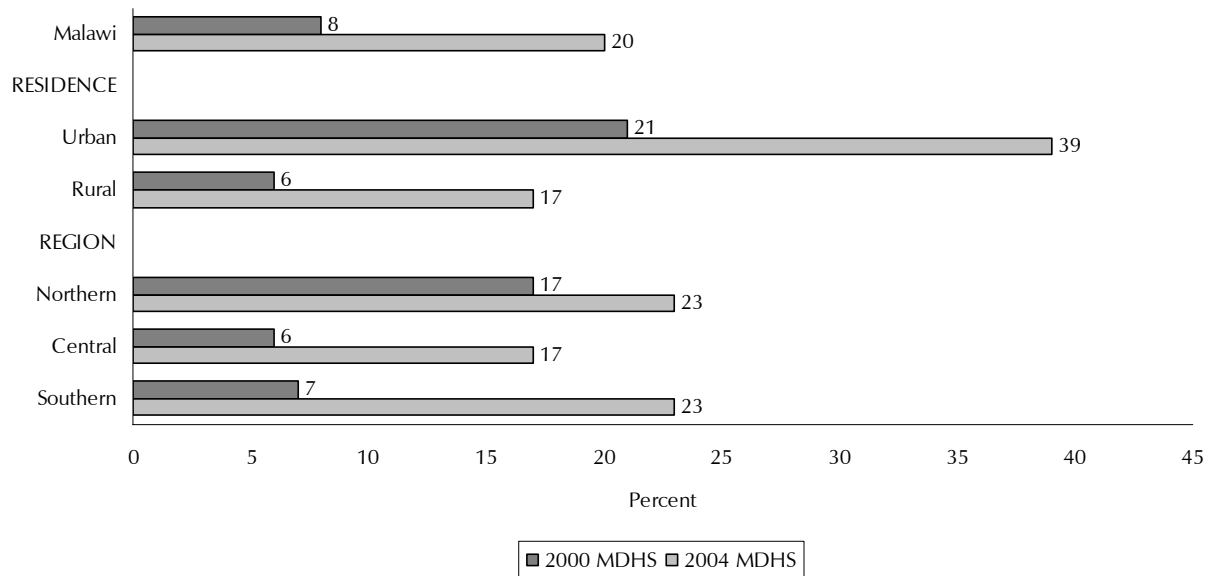
Percentage of de facto children (in households) under age five years who slept under a mosquito net the night before the survey and percentage who slept under an ever-treated net the night before the survey, by background characteristics, Malawi 2004

Background Characteristic	Percentage who slept under a net the preceding night	Percentage who slept under an ever-treated net the preceding night ¹	Percentage who slept under an ITN the preceding night ²	Number of children
Age in months				
< 12	22.0	18.6	15.3	2,378
12-23	21.2	18.6	15.7	2,293
24-35	21.7	18.9	15.8	1,881
36-47	19.2	17.1	14.3	1,941
48-59	16.7	15.4	12.7	2,047
Sex				
Male	19.4	17.1	14.3	5,195
Female	21.0	18.4	15.2	5,344
Residence				
Urban	39.3	35.2	30.2	1,420
Rural	17.3	15.0	12.4	9,119
Region				
Northern	22.7	19.6	17.4	1,350
Central	16.7	14.9	11.9	4,397
Southern	22.8	19.9	16.7	4,791
District				
Blantyre	23.9	20.6	18.8	708
Kasungu	7.9	7.2	5.9	510
Machinga	31.5	26.4	22.4	435
Mangochi	32.9	27.1	21.5	639
Mzimba	20.9	19.1	16.7	694
Salima	37.5	35.0	29.3	301
Thyolo	10.9	9.3	8.0	548
Zomba	32.0	29.6	27.2	550
Lilongwe	21.7	19.8	15.5	1,473
Mulanje	15.9	14.8	12.9	405
Other districts	16.3	13.9	11.3	4,276
Wealth quintile				
Lowest	10.1	8.0	6.4	2,090
Second	13.3	11.5	9.2	2,294
Middle	18.0	15.4	12.1	2,358
Fourth	21.7	19.4	16.7	2,071
Highest	43.1	39.1	33.8	1,726
Total	20.2	17.8	14.8	10,539

¹An ever-treated net is (1) a pretreated net or (2) a non-pretreated net that has subsequently been soaked with insecticide at any time.

²An insecticide treated net (ITN) is (1) a factory-treated net that does not require any further treatment or (2) a pretreated net obtained within the past six months or (3) a net that has been soaked with insecticide within the past six months.

Figure 14.3 Percentage of Children Under Age Five Who Slept Under a Mosquito Net the Night Before the Survey, Malawi 2000-2004



14.1.4 Use of Mosquito Nets by Pregnant Women

The danger of malaria for pregnant women has prompted many advocacy campaigns to educate not only pregnant women but also the general public on the importance of preventing malaria during pregnancy. Table 14.4 shows that 21 percent of women slept under a mosquito net, 18 percent slept under an ever-treated mosquito net and 15 percent slept under an ITN. There are virtually no differences in the use of mosquito nets between pregnant women and non-pregnant women.

Women in urban areas are more than twice as likely to sleep under an ITN as women in rural areas. As with the data for children, use of ITNs by women is higher in the Northern and Southern regions (16 and 17 percent, respectively) than in the Central Region (11 percent). Women in Salima and Mangochi are also the most likely to sleep under an ITN. Those in Thyolo are the least likely to use a net. The use of mosquito nets by women increases as wealth quintile and level of education increases. This is particularly true with ITNs.

Figure 14.4 shows that use of mosquito nets among women age 15-49 has increased substantially since the 2000 MDHS, from 8 to 21 percent.

Table 14.4 Use of mosquito nets by pregnant women

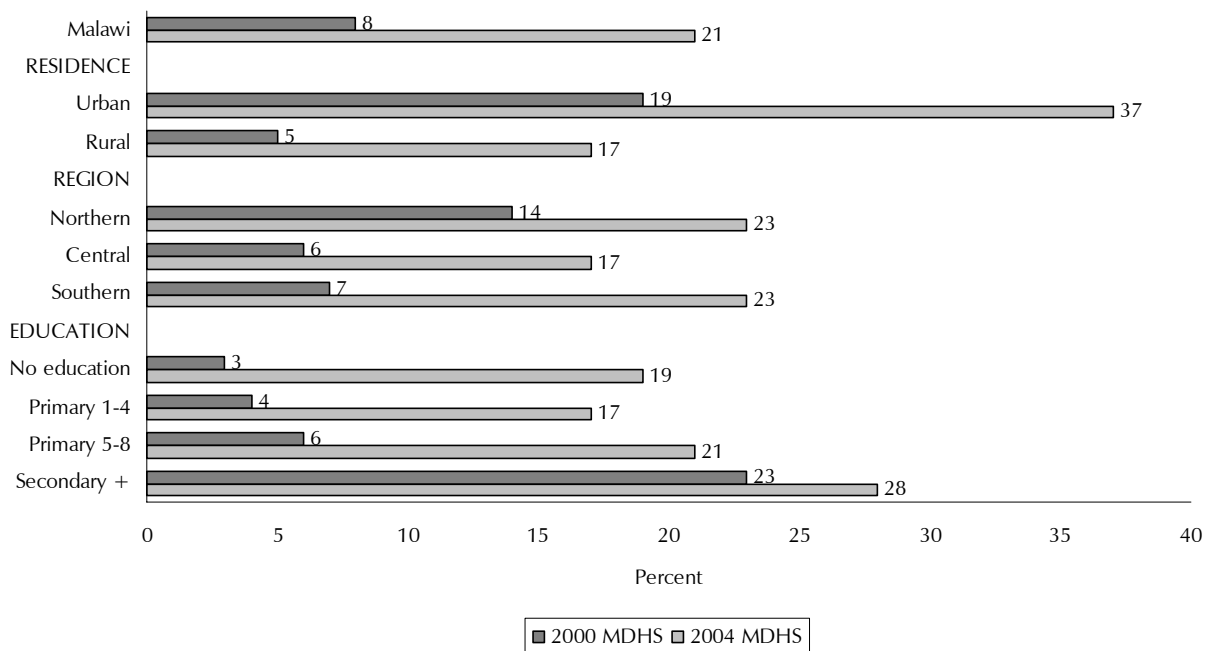
Percentage of all de facto women and pregnant de facto women age 15-49 (in household) who slept under a mosquito net (treated or untreated) and who slept under an Insecticide Treated Net (ITN) the night before the survey, by background characteristics, Malawi 2004

Background characteristic	All women			Number of women	Pregnant women			Number of pregnant women
	Percentage who slept under a net the preceding night	Percentage who slept under an ever-treated net the preceding night ¹	Percentage who slept under an ITN the preceding night ²		Percentage who slept under a net the preceding night	Percentage who slept under an ever-treated net the preceding night ¹	Percentage who slept under an ITN the preceding night ²	
Residence								
Urban	37.0	33.1	27.2	2,184	38.3	35.7	29.8	183
Rural	16.9	14.8	12.2	10,018	16.4	14.9	12.4	1,222
Region								
Northern	22.9	19.6	16.4	1,622	22.2	19.1	15.7	173
Central	17.1	15.2	12.1	4,946	15.3	14.3	11.1	578
Southern	22.9	20.2	16.9	5,634	22.0	20.2	17.6	655
Education								
No education	19.3	16.6	13.5	2,873	18.3	17.4	15.7	382
Primary 1-4	17.0	15.0	12.6	3,200	16.4	14.6	12.3	377
Primary 5-8	21.0	18.4	14.9	4,358	19.7	17.4	14.1	478
Secondary+	27.7	25.3	21.1	1,770	26.7	25.2	19.4	168
District								
Blantyre	22.5	19.6	17.4	954	25.8	24.7	20.9	106
Kasungu	9.1	8.6	7.2	517	7.4	7.4	7.4	62
Machinga	32.5	28.0	24.5	446	31.0	23.8	21.7	46
Mangochi	35.9	30.3	23.9	626	38.5	34.1	29.3	61
Mzimba	22.2	19.9	16.6	811	20.0	17.6	14.6	91
Salima	35.1	32.2	27.3	314	36.5	33.0	27.3	45
Thyolo	11.7	10.8	9.2	645	7.0	6.3	5.5	87
Zomba	30.1	28.0	26.2	666	36.0	36.0	36.0	79
Lilongwe	23.2	20.9	16.0	1,782	18.1	17.1	12.9	175
Mulanje	14.0	12.8	11.7	536	18.2	15.0	15.0	70
Other districts	16.7	14.3	11.2	4,904	15.0	13.7	10.3	583
Wealth quintile								
Lowest	9.0	6.9	5.2	2,147	10.2	7.8	6.0	247
Second	13.1	11.5	9.2	2,368	12.6	11.4	9.6	319
Middle	15.7	13.6	11.0	2,474	14.8	14.2	12.6	342
Fourth	21.6	19.1	16.2	2,438	20.9	19.6	17.0	284
Highest	39.2	35.5	29.5	2,776	44.9	41.1	32.6	213
Total	20.5	18.1	14.9	12,202	19.3	17.6	14.7	1,405

¹An ever-treated net is (1) a pretreated net or a non-pretreated net that has subsequently been soaked with insecticide at any time.

²An insecticide treated net (ITN) is (1) a factory-treated net that does not require any further treatment or (2) a pretreated net obtained within the past six months or (3) a net that has been soaked with insecticide within the past six months.

Figure 14.4 Percentage of Women Age 15-49 Who Slept Under a Mosquito Net on the Night Before the Survey, Malawi 2000-2004



14.2 INTERMITTENT PREVENTIVE TREATMENT DURING PREGNANCY

Pregnant women are at particular risk of malaria infection. Its consequences in the mother are anaemia and fever, while newborns suffer low birth weight. Placental parasitaemia may be high with undetectable peripheral parasitaemia. Intermittent Preventive Treatment (IPT) in pregnancy prevents development of malaria and eliminates malaria parasites from the placenta. IPT with SP has been shown to reduce low birth weight, anaemia and severe disease. As a protective measure, the Malawi National Malaria Policy recommends that pregnant women receive Intermittent Preventive Treatment with SP at least twice during the pregnancy (at least one month apart) to clear malaria parasites from the body. The treatment should be administered once in the second trimester and once in the third trimester.

In the 2004 MDHS, women who gave birth in the past five years were asked whether they took any antimalarial tablets during pregnancy, which drug was taken, and how many times it was taken. The data do not allow assessment of the timing of the doses relative to stage of pregnancy. Table 14.5 shows that 79 percent of pregnant women SP/Fansidar during pregnancy to prevent malaria. However, less than half (47 percent) took were covered by the recommended two doses. Most women who took SP/Fansidar during pregnancy received the drug during their antenatal care visits. Forty-three percent of pregnant women received a complete course of IPT, that is, two doses of SP/Fansidar as part of their routine ANC.

According to the data in Table 14.5 and Figure 14.5, urban women are more likely to take two doses of SP/Fansidar during pregnancy than rural women (54 percent and 45 percent, respectively). Better educated women and those living in households in the highest wealth

quintile are also more likely than other women to receive two doses of SP/Fansidar during pregnancy.

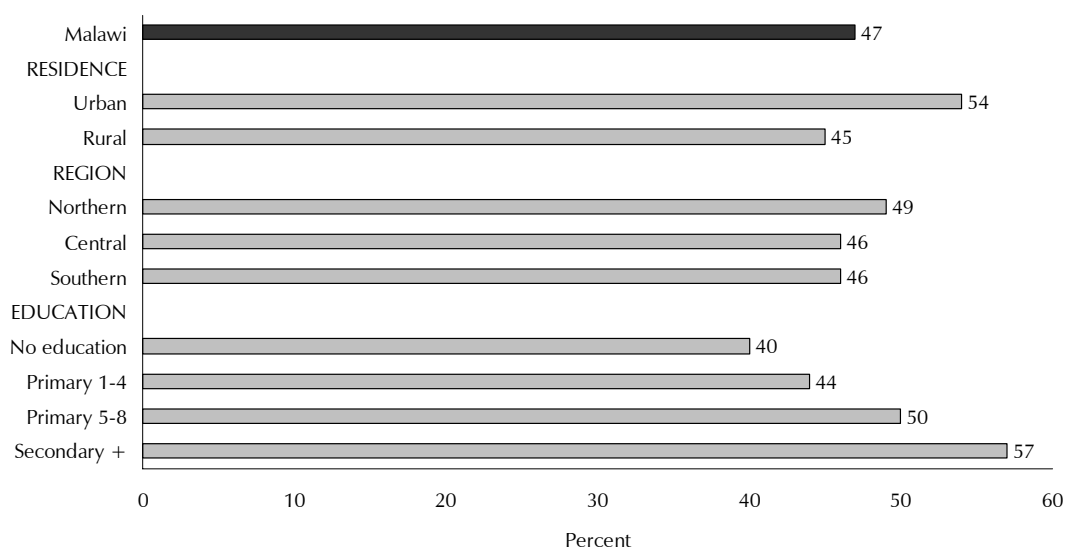
The percentage of women who took at least two doses of SP/Fansidar during pregnancy is slightly higher in the Northern Region (49 percent) than in the Central and Southern regions (46 percent). Among the oversampled districts, the proportion of women who took at least two doses of SP/Fansidar ranges from 36 percent in Thyolo to 60 percent in Blantyre.

Background characteristic	Percentage who took any antimalarial drug	SP/Fansidar		Percentage who received any SP/Fansidar during an ANC visit	Percentage who received 2+ doses, at least one during an ANC visit	Number of women
		Percentage who took any SP/Fansidar	Percentage who took 2+ doses			
Birth order						
1	78.1	75.7	47.8	71.4	45.0	1,026
2-3	81.8	80.2	47.0	74.1	43.3	1,705
4-6	82.7	80.8	46.0	74.8	42.7	1,330
7+	76.0	74.6	43.4	66.6	38.4	542
Timing of birth						
< 1 year ago	80.4	78.5	46.1	72.5	42.6	2,388
1 year ago	80.7	79.0	46.8	73.2	43.3	2,216
Residence						
Urban	86.2	84.6	53.8	80.3	51.1	583
Rural	79.7	77.9	45.4	71.8	41.7	4,021
Region						
Northern	85.8	84.8	49.4	82.9	48.1	559
Central	77.8	75.0	45.7	68.1	41.6	1,931
Southern	81.6	80.5	46.4	74.5	42.8	2,115
District						
Blantyre	87.9	86.8	60.1	79.4	53.8	303
Kasungu	78.3	73.6	41.2	69.4	39.3	226
Machinga	82.1	78.4	46.5	61.8	37.3	191
Mangochi	66.3	64.6	43.9	58.3	38.7	274
Mzimba	89.1	87.9	50.6	86.9	50.4	289
Salima	87.7	86.5	56.6	84.2	55.0	138
Thyolo	81.8	81.2	35.6	76.3	34.8	240
Zomba	90.8	90.3	58.3	88.6	56.8	239
Lilongwe	76.5	74.9	44.9	69.2	41.7	627
Mulanje	80.3	80.3	44.9	75.0	42.4	178
Other districts	79.6	77.5	44.5	71.1	40.5	1,900
Education						
No education	70.8	68.4	39.6	60.8	35.3	1,153
Primary 1-4	77.8	75.6	43.8	68.5	39.2	1,354
Primary 5-8	86.4	85.1	50.3	80.8	47.5	1,561
Secondary+	91.3	90.0	57.0	86.8	55.6	534
Missing	100.0	100.0	0.0	100.0	0.0	1
Wealth quintile						
Lowest	78.5	76.1	42.1	70.3	39.0	919
Second	75.4	73.2	42.6	65.8	37.6	1,111
Middle	79.4	77.6	46.2	73.1	43.7	1,001
Fourth	82.2	80.6	47.8	74.5	44.4	871
Highest	91.1	90.2	57.0	84.9	53.5	701
Total	80.5	78.7	46.5	72.9	42.9	4,604

¹ IPT: Intermittent Preventive Treatment is preventive intermited treatment with SP/Fansidar during an antenatal care (ANC) visit.

It should be noted that data from the 2004 MDHS do not include IPT for women whose pregnancy in the five years preceding the survey did not end in a live birth.

Figure 14.5 Percentage of Pregnant Women Who Took at Least 2 Doses of SP for IPT of Malaria During Pregnancy in the Five Years Preceding the Survey



MDHS 2004

14.3 PREVALENCE AND MANAGEMENT OF MALARIA IN CHILDREN

Fever is the major manifestation of malaria. In the 2004 Malawi DHS, mothers were asked whether their children under age five had fever in the two weeks preceding the survey. Although fever occurs all year round, malaria is more prevalent during the rainy season, and such temporal factors must be taken into account when interpreting the occurrence of fever as an indicator of malaria prevalence. If fever was reported, the mother was asked whether treatment was sought at a health facility and whether the child was given any medication and, if so, how soon the medication was taken after the episode of illness started.

14.3.1 Initial Response to Child's Fever

Table 14.6 shows the percent distribution of children with fever in the past two weeks by specific actions taken as the first response to the fever. The data show that 21 percent of children were given medication that was already present in the home and 39 percent were given medication without prescription. Almost one in three children was taken to a health facility; 24 percent were taken to a government-run facility. Six percent of children with fever were not treated.

Response to fever in a child varies by the child's age, residence, and socioeconomic status. Younger children, children who live in urban areas, in the Northern Region, children of better-educated mothers, and who are in households in the highest wealth quintile are more likely

Table 14.7 shows the prevalence and treatment of fever by background characteristics. The data show that four in ten children had fever in the two weeks preceding the survey. Children 6-23 months are the most likely to suffer from fever or convulsions. Children in rural areas are more likely (38 percent) to have fever than urban children (30 percent). The incidence of fever is also related the socioeconomic status of the household; children in the lowest wealth quintile are the more likely to have fever or convulsions than children in the higher quintiles.

Table 14.7 Prevalence and prompt treatment of fever by background characteristics					
Percentage of children under five years of age with fever in the two weeks preceding the survey, and among children with fever, percentage who received antimalarial drugs and who received the drugs the same/next day after developing the fever, by background characteristics, Malawi 2004					
Background characteristics	Percentage of children with fever	Number of children	Among children with fever:		Number of children
			Percentage who received antimalarial drugs	Percentage who received antimalarial drugs same/next day	
Age in months					
< 6	30.7	1,109	14.3	12.6	341
6-11	53.2	1,188	29.7	22.0	632
12-23	49.5	2,194	31.4	25.2	1,087
24-35	39.5	1,743	31.1	26.4	689
36-47	28.8	1,741	26.2	20.1	501
48-59	21.1	1,802	28.6	22.9	381
Sex					
Male	37.1	4,839	28.7	23.0	1,793
Female	37.2	4,938	28.2	22.5	1,837
Residence					
Urban	29.9	1,341	42.0	36.5	401
Rural	38.3	8,436	26.7	21.0	3,230
Region					
Northern	28.4	1,239	38.2	30.0	351
Central	39.9	4,071	24.5	20.3	1,624
Southern	37.1	4,468	30.2	23.6	1,655
District					
Blantyre	29.4	670	31.7	27.8	197
Kasungu	40.0	471	21.8	15.0	188
Machinga	35.6	405	30.1	21.3	144
Mangochi	36.8	566	24.7	17.7	208
Mzimba	28.9	630	31.0	22.5	182
Salima	42.1	281	32.0	22.7	118
Thyolo	47.3	514	40.0	27.0	243
Zomba	40.1	498	38.5	26.3	200
Lilongwe	38.3	1,376	27.2	25.0	528
Mulanje	44.3	375	29.0	25.4	166
Other districts	36.5	3,992	25.7	21.6	1,455
Education					
No education	37.3	2,594	21.2	16.3	967
Primary 1-4	40.4	2,805	24.6	18.8	1,132
Primary 5-8	35.9	3,314	34.1	27.8	1,189
Secondary+	32.1	1,062	41.4	36.3	340
Wealth quintile					
Lowest	40.0	1,889	23.2	15.6	757
Second	41.2	2,170	26.3	22.2	894
Middle	37.6	2,206	25.5	19.4	830
Fourth	35.3	1,916	33.0	27.6	676
Highest	29.7	1,597	39.5	34.0	474
Total	37.1	9,777	28.4	22.7	3,630

Among children with fever, 28 percent were given antimalarial drugs and 23 percent were given the drug on the same day or the day following the onset of the fever. Children in urban areas are more likely to be given antimalarial drugs the same day or the following day than children in the rural areas (37 and 21 percent, respectively). Children in households in the highest wealth quintile and children of educated mothers are more likely to be given antimalarial drugs on the same day or the following day compared to children from poorer households or whose mothers have less education.

Table 14.8 provides a breakdown of use and timing of antimalarial drugs by type of drug. Quinine is the most commonly used antimalarial drug, received by 45 percent of children under five with fever during the two weeks preceding the survey. Amodiaquine is the second most common antimalarial drug (39 percent), followed by SP/Fansidar (23 percent). Less than 1 percent of children under five with fever took Chloroquine or Artesunate. SP/Fansidar was the drug most likely to be taken soon after the onset of illness. Nineteen percent of children with fever took SP/Fansidar the same day or the day following the start of the fever. This finding reflects Malawi's policy to use SP/Fansidar as the first-line treatment for malaria.

Analysis of the use of antimalarial drugs by background characteristics shows some interesting trends. Use of SP/Fansidar and quinine increases with educational level and wealth quintile of the mother. On the other hand, Amodiaquine is more common among children whose mothers have less education and are in the wealth quintiles. Children with fever in the Central Region are less likely to receive SP/Fansidar and Amodiaquine than children in the Northern and Southern regions, but they are more likely to receive quinine. In the oversampled districts, use of SP/Fansidar by children under five with fever ranges from 37 percent in Thyolo to 16 percent in Kasungu. Use of SP/Fansidar on the day the fever started or the day after is highest in Blantyre (24 percent) and lowest in Kasungu (11 percent).

DOMESTIC VIOLENCE

Christobel Deliwe Chakwana

15.1 INTRODUCTION

The 2004 survey represents the first time the Malawi Demographic and Health Survey (MDHS) collected information on domestic violence. The inclusion of the domestic violence module in the 2004 MDHS is in recognition of the presence of gender-based violence as an economic, human right, and health issue in Malawi. Gender-based violence is defined as any act of violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivations of liberty, where occurring in public or private life (United Nations, 1993 and 1995). Domestic violence includes physical, sexual, emotional, psychological or economic abuse committed by a person against a spouse, child, and any other person who is a member of the household, dependent or parent of a child of that household. Domestic violence has negative health consequences on the victims and more especially on the reproductive health of women. It contributes to the maternal mortality rates as it results in health-related problems like gynaecological problems.

In traditional Malawian culture, wife battering is regarded as normal. In Malawi, domestic violence occurs across all socio-economic and cultural backgrounds. This type of violence has been treated as a private issue until recently when the government and its stakeholders, in response to the international and regional instruments on women's rights, started to implement various initiatives aimed at creating awareness of the dangers of gender-based violence and changing the social order in which a woman is assumed to be of lesser status and her husband leads in all family aspects.

Having ratified a number of international and regional documents on women's rights and gender equality, Malawi has developed a National Strategy to Combat Gender-Based Violence (2000-2006). Furthermore, a draft Prevention of Domestic Violence Bill is in place awaiting Cabinet approval. This bill emphasises Section 24 in the 1994 Constitution of Malawi which guarantees equality between women and men as well as women's right to property, and invalidates any law that discriminates against women, in particular, practices such as sexual abuse, harassment and violence.

The collection of data on domestic violence is challenging because women may not disclose issues of domestic violence as it is regarded as bringing shame to their family. The society discourages women from talking about their experiences of domestic violence to maintain respect from the community. In a household survey such as the 2004 MDHS, the collection of sensitive information such as violence in the house, requires the establishment of rapport between the interviewer and the respondent. This is the main reason this module is placed toward the end of the woman's questionnaire. If there is more than one eligible for individual interview woman in a household, the interviewer selected one woman randomly to be interviewed with the domestic violence module using the Kish-grid technique.

Informed consent of the respondents was obtained for the survey at the onset of individual interview. A statement was read to the 2004 MDHS respondents informing them of the survey

objectives and that they were going to be asked questions that may be personal in nature. The statement highlights the importance of the information to be obtained in understanding the situation of women in Malawi. To prepare the 2004 MDHS field staff in collecting data on domestic violence, they received a special presentation on gender-based violence, focusing on domestic violence. Interviewers were instructed that interviews can only proceed when maximum privacy had been ensured. If privacy was not assured, the domestic violence module was not to be asked.

15.2 PHYSICAL VIOLENCE SINCE AGE 15

Table 15.1 shows the percent distribution of all women who report experiencing physical violence since age 15 and in the 12 months prior to the survey. In the survey, respondents to the domestic violence module have multiple opportunities to disclose their experiences. Women are considered as having experienced violence if they report ever experiencing one or more types of violence. All women who experienced any form of violence were also asked how often this happened in the 12-month period before the survey. Women who reported violence during pregnancy only were not asked the frequency of violence over the past 12 months.

The data show that one in three women (28 percent) experienced physical violence since age 15 and 15 percent experienced it in the 12 months preceding the survey. Women age 20-39 are more likely to have experienced violence since they were 15 than younger and older women (28-30 percent compared with 26 percent or less).

The 2004 MDHS data show that a woman's marital status is associated with her experience of domestic violence; while 42 of women who are divorced or separated from their spouse report having experienced physical violence since the age of 15, the proportions for currently married and widowed women are 28 percent and 15 percent, respectively. Physical violence is also experienced by a high proportion of women who have never been married (23 percent).

There are no significant differentials in the experience of physical violence since age 15 by residence. However, rural women are more likely than urban women to have experienced physical violence in the 12 months prior to the survey (15 percent compared with 11 percent).

The social and economic background of a woman has a bearing on her chances of experiencing physical violence. This experience does not vary consistently with their education; women with no education are less likely than women with some primary education to experience violence. Among educated women, education is negatively associated with the likelihood of experiencing violence. Women who have at least some secondary education are slightly less likely to have experienced domestic physical violence than less educated women. Small variations are found in the experience of physical violence by women's employment.

Women's experience with physical violence since age 15 does not vary much by wealth index. However, women's recent experience in violence is negatively associated with their wealth status; women in the lowest wealth quintile are slightly more likely to experience physical violence than the women in higher wealth categories.

Table 15.1 Experience of physical violence since age 15
 Percentage of women who have ever experienced violence since age 15 and percentage who experienced violence during the 12 months preceding the survey, by background characteristics, Malawi 2004

Background characteristic	Percent who have experienced physical violence since the age of 15		Number of women
	Ever	In past 12 months ¹	
Age			
15-19	25.7	15.1	1,970
20-29	30.3	16.0	4,192
30-39	28.3	14.5	2,130
40-49	24.4	9.5	1,409
Marital status			
Currently married	28.3	15.9	6,856
Divorced/separated	42.2	16.5	832
Widowed	14.5	2.1	365
Never married	23.1	10.8	1,647
Residence			
Urban	28.0	10.6	1,740
Rural	28.1	15.4	7,961
Region			
Northern	28.1	14.5	9,701
Central	29.6	15.2	3,919
Southern	27.6	14.0	4,500
Education			
No education	24.6	12.0	2,266
Primary 1-4	31.5	17.9	2,513
Primary 5-8	28.4	15.2	3,386
Secondary+	26.9	11.4	1,534
Employment status			
Employed for cash	30.1	16.4	1,723
Employed, but not for cash	29.6	15.0	3,635
Not employed	26.0	13.4	4,341
Wealth quintile			
Lowest	29.4	15.7	1,705
Second	29.3	17.0	1,880
Middle	27.4	14.6	1,966
Fourth	27.7	14.3	1,943
Highest	26.9	11.7	2,206
Total	28.1	14.5	9,701

¹Excludes women who have been beaten only during pregnancy

15.3 PERPETRATORS OF PHYSICAL VIOLENCE

Table 15.2 shows the percent distribution of women reporting any physical violence by the person or persons who subject them to physical violence according to their marital status. Overall, the data show that husbands are the main perpetrators of violence. Among currently married women who have experienced physical violence, 77 percent reported either a current or previous husband as

being the perpetrator. The 2004 MDHS also indicates that 85 percent of divorced and separated women who ever reported experiencing physical violence say a husband was involved.

Table 15.2 Perpetrators of physical violence

Percent distribution of women reporting any physical violence by perpetrator of the violence, according to current marital status, Malawi 2004

Current marital status	Perpetrator				Total	Number
	Current husband ¹	Last/previous husband only	Any husband and other persons	Persons other than husband		
Currently married	60.7	2.5	14.2	22.5	100.0	1,940
Divorced/separated	na	71.3	13.3	15.3	100.0	351
Widowed	na	18.7	7.0	74.3	100.0	53
Never married	na	na	na	100.0	100.0	380
Total	43.2	11.4	12.0	33.4	100.0	2,724

¹ Includes women who were also beaten by a previous husband
na = Not applicable

15.4 VIOLENCE DURING PREGNANCY

Women experience violence in all stages of their life cycle. In the 2004 MDHS, women who had a pregnancy (whether it resulted in a live birth or not) and those who are currently pregnant at the time of the survey were asked whether they experienced any type of physical violence during any of their pregnancies and who administered that violence. Table 15.3 shows the findings. The data show that 5 percent of women experienced violence when they were pregnant.

Violence during pregnancy takes place at all ages of the woman. There are small variations in the prevalence by age. The prevalence of physical violence during pregnancy varies by the woman's marital status. Divorced or separated women are the most likely to report they experienced physical violence during pregnancy, suggesting that the violence may have contributed to the marriage breakdown (11 percent compared with 5 percent or less for currently married women, widowed women, and never married women).

Pregnant women in the rural areas are at a slightly higher risk of facing physical violence than their counterparts in the urban areas (6 percent compared with 4 percent). There is little regional variation in the experience of violence during pregnancy. Women's experience with domestic violence also does not vary much according to their employment status.

Most women who experience physical violence during pregnancy do so at the hands of a husband (70 percent). Almost one in three women who experienced violence during pregnancy did so at the hand of someone other than a husband (data not shown).

Table 15.3 Violence during pregnancy		
Percentage of ever-pregnant women who were physically violated during pregnancy, according to background characteristics, Malawi 2004		
Background characteristic	Percent experiencing violence during pregnancy	Number of women ever pregnant
Age		
15-19	3.6	689
20-29	5.7	3,839
30-39	5.4	2,091
40-49	4.6	1,389
Marital status		
Currently married	4.7	6,642
Divorced/separated	10.7	798
Widowed	3.5	363
Never married	4.0	205
Residence		
Urban	3.8	1,286
Rural	5.5	6,722
Region		
Northern	5.5	1,039
Central	5.7	3,110
Southern	4.9	3,859
Employment status		
Employed for cash	6.0	1,522
Employed not for cash	5.8	3,249
Not employed	4.4	3,235
Total	5.3	8,008

15.5 MARITAL CONTROL BY HUSBAND

Marital violence refers to violence perpetuated by partners in a marital union. A series of questions were included in the 2004 MDHS to elicit the degree of marital control exercised by the spouse or partner over the respondent. Attempts by male spouses/partners to closely control and monitor their female counterparts have been found to be among the most important early warning signs, as well as correlates of violence in a relationship. Controlling behaviours most often manifest themselves in terms of extreme possessiveness, jealousy, and attempts to isolate the woman from her family and friends. Since the accumulation of such behaviours is more significant than the display of any single behaviour, the proportion of women whose husbands display at least three of the specified behaviours is highlighted.

In order to determine the degree of marital control by husbands on their wives, women were asked whether they experienced any of a list of specific acts of controlling behaviours by their husbands, such as the husband is jealous or gets angry if she talks to other men, accuses her of being unfaithful, does not permit meetings with girl friends, tries to limit contact with family, insists on knowing where she is at all times, and does not trust her with any money. Table 15.4 shows the

percentage of ever-married women whose husbands or partners display each of the listed behaviours by the background characteristics of the respondent.

Table 15.4 Degree of marital control by husband

Percentage of ever-married women by whether the current/last husband demonstrates(d) different types of controlling behaviour, according to background characteristics, Malawi 2004

Background characteristic	Percentage of women whose husband:								Number of women
	Is jealous/ angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit meetings with girl friends	Tries to limit contact with family	Insists on knowing where she is at all times	Doesn't trust her with any money	Does at least 3 of these acts	Does none of these acts	
Age									
15-19	46.1	16.5	19.4	19.3	60.2	19.3	29.9	20.0	708
20-29	50.5	17.1	19.6	21.2	59.3	19.0	30.5	20.7	3,833
30-39	53.0	17.9	19.5	19.6	55.9	18.6	31.3	18.0	2,110
40-49	45.8	16.9	16.6	16.8	52.1	14.5	26.7	21.8	1,402
Marital status									
Married	50.8	16.6	19.1	19.8	59.4	18.5	29.7	21.7	6,856
Married once	49.6	16.1	18.7	19.6	58.4	17.8	28.7	22.4	5,403
Married more than once	55.1	18.4	20.6	20.7	63.0	21.2	33.2	19.2	1,453
Previously married	45.2	20.9	18.5	20.1	44.8	15.9	32.0	10.8	1,197
Number of living children									
0	49.2	17.9	21.9	23.2	61.2	19.3	32.9	18.6	723
1-2	49.1	16.3	18.8	20.2	57.9	18.1	29.6	20.3	3,228
3-4	52.1	19.0	19.5	19.7	57.5	18.9	30.6	19.0	2,262
5 or more	49.1	16.5	17.7	18.0	54.2	16.8	28.9	21.7	1,840
Education									
No education	49.5	19.3	20.3	21.0	57.3	18.9	32.4	20.0	2,217
Primary 1-4	49.6	19.2	19.6	19.8	58.9	18.8	30.6	18.5	2,216
Primary 5-8	50.9	16.0	18.7	19.1	56.0	18.3	29.5	20.7	2,695
Secondary+	48.8	11.1	15.6	19.3	56.7	13.9	24.6	22.6	925
Employment status									
Employed									
For cash	47.7	18.0	18.8	18.4	54.2	17.2	28.9	20.4	1,520
Not for cash	50.7	17.2	19.4	20.4	61.6	16.8	30.0	17.2	3,300
Not employed	50.2	16.9	18.7	20.0	54.2	19.9	30.5	23.0	3,232
Husband's education									
No education	52.6	23.2	22.2	23.8	60.3	21.6	35.8	18.1	1,199
Primary 1-4	50.3	19.3	18.4	19.0	60.0	18.8	31.4	20.4	1,493
Primary 5-8	49.8	16.4	19.2	19.3	56.7	18.2	29.2	19.6	3,294
Secondary+	48.0	13.3	17.0	18.9	54.5	14.9	26.3	22.3	1,951

Continued...

Table 15.4 Degree of marital control by husband (continued)

Percentage of ever-married women by whether the current/last husband demonstrates(d) different types of controlling behaviour, according to background characteristics, Malawi 2004

Background characteristic	Percentage of women whose husband:								Number of women
	Is jealous/angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit meetings with girl friends	Tries to limit contact with family	Insists on knowing where she is at all times	Doesn't trust her with money	Does at least 3 of these acts	Does none of these acts	
Difference in age between husband and wife									
Wife 3+ years older than husband	54.7	14.6	13.9	14.6	56.0	11.3	23.9	21.6	104
Same age or 1-2 years different	47.5	15.7	20.9	20.2	58.3	19.1	29.7	22.6	1,299
Wife 3-4 years younger	51.3	14.6	18.8	19.9	59.1	17.0	28.2	21.2	1,700
Wife 5-9 years younger	51.0	17.5	18.3	18.8	59.4	18.3	29.1	22.0	2,489
Wife 10+ years younger	52.8	18.4	19.7	21.3	61.1	20.7	32.7	20.6	1,214
Formerly married	45.2	20.9	18.5	20.1	44.8	15.9	32.0	10.8	1,197
Wealth quintile									
Lowest	52.1	21.9	20.6	20.6	61.2	21.3	34.7	15.0	1,473
Second	51.5	19.8	21.1	22.8	59.1	19.7	32.8	18.5	1,698
Middle	47.4	18.0	19.8	20.3	54.8	19.4	30.1	22.1	1,706
Fourth	49.0	15.1	17.2	17.1	57.8	16.6	28.2	21.2	1,605
Highest	49.9	11.5	16.3	18.3	53.6	13.6	24.4	23.4	1,572
Total	49.9	17.2	19.0	19.9	57.2	18.1	30.0	20.1	8,054

Note: Total includes some women for whom husband's education and age difference is missing.

The 2004 MDHS results show that insistence on knowing where they are at all times and being jealous or angry if they talk to other men are the main controlling behaviours that women experience from their husbands (57 percent and 50 percent, respectively). Just under 20 percent of ever-married women say that their husbands try to limit their contact with their families (20 percent), do not permit them to meet with their female friends (19 percent), do not trust them with any money (18 percent), or frequently accuse them of being unfaithful (17 percent).

Overall, there are few significant differences in the experience of marital control by the woman's other background characteristics; domestic violence cuts across socioeconomic status of women. Women experience domestic violence irrespective of their education levels, employment status, economic status, number of children and their husbands' educational levels. Women age 20-39 are more likely than women in other age groups to face their husband's jealousy or anger if they talk to other men (51-53 percent compared with 46 percent). Women in younger age groups are more likely than older women to report that their husbands insist on knowing where they are at all times.

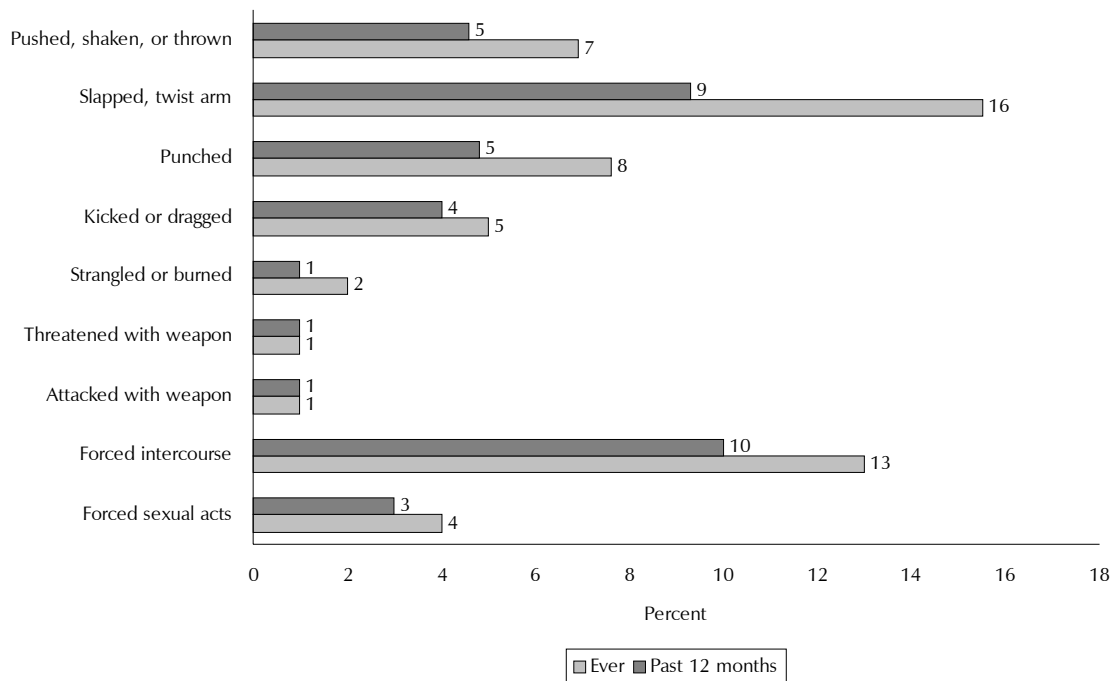
Considering the summary measures, 30 percent of women indicate that they experience their husbands' controlling behaviours through three of the listed behaviours and 20 percent of women indicate that their husbands do not exercise marital control of any kind. The controlling behaviours lessen somewhat as the woman's education and the wealth status increases. Husbands with secondary

violence. About one-third of ever-married women (30 percent) experience at least one of the three forms of violence, while 4 percent experience all three forms of violence. Among women who have experienced physical violence, most report forms of violence considered “less severe.”

Women age 20-39, women who are previously married, women with 3-4 living children, women who have incomplete primary education, and women who are employed for cash are more likely than other women to report emotional, physical, or sexual violence by their husbands. Nonetheless, the survey results show that all women irrespective of age, marital status, number of children, educational levels and employment status are at risk of all forms of violence by their husbands.

Figure 15.1 shows the proportion of ever-married women (those currently married, divorced or separated) who have ever experienced different forms of violence by their current or last husbands and experienced violence during the 12 months preceding the survey.

Figure 15.1 Percentage of Ever-married Women Who have Experienced Violence by Their Current or Last Husband (ever, and in past 12 months)



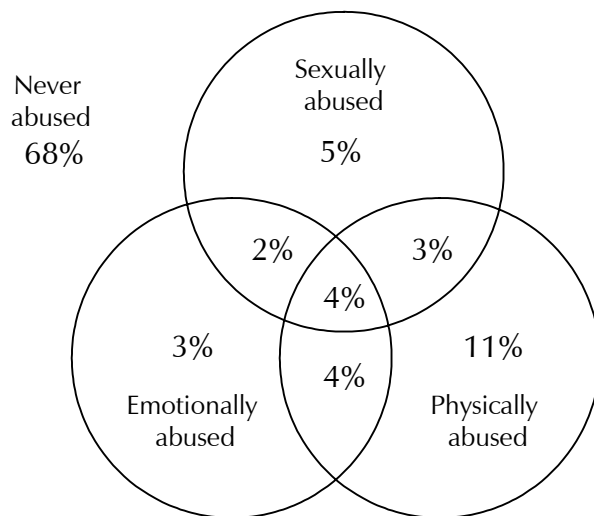
MDHS 2004

The most common forms of spousal violence are slapping and arm twisting (16 percent) and forced intercourse or marital rape (13 percent). Other forms of violence frequently reported include punching (8 percent), pushing, shaking or having something thrown (7 percent), being kicked or dragged (5 percent), and being forced into sexual acts (4 percent).

Marital rape appears to be common, with 10 percent of women reporting forced sexual intercourse in the 12 months preceding the survey. It should be noted that due to cultural norms in Malawi, which discourage the discussion of sexual or conjugal issues, marital violence in the survey may have been underreported.

Figure 15.2 summarises the information on various types of marital violence. Sixty-eight percent of women have never experienced marital violence. Of those who did, one in five women experienced physical abuse and 4 percent are abused sexually, emotionally, and physically.

Figure 15.2 Percentage of Women Who Ever Experienced Sexual, Physical, and/or Emotional Violence



Note: Includes non-marital violence

MDHS 2004

15.7 FREQUENCY OF SPOUSAL VIOLENCE

The frequency of spousal violence is an indicator of the prevalence of domestic violence. Table 15.6 shows the percent distribution of ever-married women reporting any kind of physical or sexual spousal violence by how often it occurred in the 12 months prior to the survey according to their background characteristics. The 2004 MDHS results show that only 30 percent of women who have ever experienced physical or sexual violence by their husband did not experience such violence in the past 12 months, 39 percent of women experienced physical or sexual violence once or twice, 21 percent experienced the same forms of violence three to five times, and 10 percent experienced the violence more than five times in the last 12 months.

The data also show that marital violence varies by the woman's background characteristics. Frequency of violence decreases with age; while 10 percent of ever-abused women age 15-19 did not experience violence from their spouse in the last 12 months, almost half (45 percent) of women 40-49 did not experience spousal violence during this time. Formerly married women are the least likely while currently married women are the most likely to report physical or sexual violence in the last 12 months.

The frequency of physical or sexual violence decreases with increasing number of children. Ever-abused women who are not employed are the most likely to have experienced physical or sexual violence in the last 12 months.

One would expect that women with no education would be more likely to experience physical or sexual violence in the past 12 months than educated women. The survey results, however, show that among women who experienced violence by their current or last husband, the frequency of violence does not vary much by the woman's education.

Table 15.6 Frequency of spousal violence

Percent distribution of ever-married women reporting physical or sexual violence by current or last husband by frequency of any form of such violence in the 12 months preceding the survey, according to selected background characteristics, Malawi 2004

Background characteristic	Frequency of any type of physical or sexual violence in the past 12 months ¹					Total	Number of women
	0	1-2	3-5	5 +	Don't know		
Woman's age							
15-19	10.1	56.2	20.1	13.3	0.3	100.0	177
20-29	25.7	41.1	22.4	10.9	0.0	100.0	1,082
30-39	35.5	30.6	23.2	10.3	0.5	100.0	556
40-49	44.9	36.2	11.7	6.7	0.5	100.0	325
Marital status							
Married once	26.9	42.2	21.1	9.8	0.1	100.0	1,442
Married more than once	20.1	42.4	23.0	13.5	1.0	100.0	364
Formerly married	53.4	20.6	16.9	9.0	0.0	100.0	334
Number of living children							
0	42.0	32.8	16.3	8.9	0.0	100.0	179
1-2	27.7	39.9	21.6	10.5	0.3	100.0	828
3-4	35.0	35.8	19.0	9.8	0.4	100.0	653
5 +	38.6	36.3	17.1	7.6	0.4	100.0	479
Education							
No education	34.2	39.0	16.8	9.7	0.3	100.0	527
Primary 1-4	24.6	41.4	22.8	11.3	0.0	100.0	646
Primary 5-8	30.8	36.7	22.1	9.9	0.4	100.0	763
Secondary+	32.0	38.4	19.6	10.0	0.0	100.0	204
Employment status							
Employed for cash	31.8	33.9	19.9	14.2	0.2	100.0	449
Employed not for cash	33.6	37.5	20.1	8.5	0.2	100.0	900
Not employed	24.5	43.1	22.0	10.0	0.3	100.0	791
Total	29.9	38.8	20.8	10.3	0.2	100.0	2,140

¹ Excludes women who experienced physical violence during pregnancy only.

15.8 ONSET OF SPOUSAL VIOLENCE

To study the timing of the onset of marital violence, the 2004 MDHS asked ever-married women who experienced physical or sexual spousal violence when the first episode of violence took place after marriage. Table 15.7 shows the interval between marriage and the first episode of spousal physical or sexual violence.

Table 15.7 Onset of spousal violence

Percent distribution of ever-married women who have experienced physical or sexual violence by current or last husband by time between marriage and first experience of violence, according to marital status and duration since first marriage, Malawi 2004

Marital status/duration since first marriage	Years between union and first experience of violence ¹								Total	Number of women
	Before marriage	Less than 1 year	1-2 years	3-5 years	6-9 years	10 or more years	After divorce	Don't know/missing		
Currently married										
Married once	2.3	19.5	36.3	21.6	10.8	7.6	na	2.0	100.0	1,442
< 6 years	3.5	32.7	49.9	11.2	na	na	na	2.7	100.0	510
6-9 years	1.7	17.5	35.7	27.4	16.4	na	na	1.3	100.0	307
10 or more years	1.5	9.7	25.5	27.1	16.8	17.5	na	1.8	100.0	625
Married more than once	1.2	25.7	30.3	22.5	8.8	7.0	0.5	4.1	100.0	364
Divorced/separated										
	1.2	27.3	34.7	22.5	4.4	3.5	3.7	2.8	100.0	334
Total	1.9	21.8	35.0	21.9	9.5	6.8	0.8	2.3	100.0	2,140

¹ Excludes women who experienced physical violence during pregnancy only.
na = Not applicable

Table 15.7 shows that spousal violence can be initiated throughout a woman’s married life. It may begin before marriage, although it is more likely to start during the first five years of marriage. One in five women who have experienced physical or sexual spousal violence report that violence began during the first year of marriage. Initiation of violence is most prevalent 1-2 years after marriage (35 percent) and drops below 10 percent after the first five years. A small percentage of women who experienced violence say it began before marriage or after being divorced from their spouse (2 percent and 1 percent, respectively).

15.9 PHYSICAL CONSEQUENCES OF SPOUSAL VIOLENCE

The severity of violence can be judged from the severity of the act itself or from its consequences. Table 15.8 provides insight into the physical consequences of violence, including the type and severity of the violence. The consequences of spousal violence range from bruises and aches to injury or broken bones, which may require medical attention. Table 15.8 shows that 7 percent of all ever-married women report ever having been beaten to the point of sustaining bruises and aches, while 2 percent had an injury or broken bone, and 2 percent had to get medical help. Most of these women sustained such injuries in the year before the survey.

All three consequences (bruises and aches, injuries and medical treatment) are most often reported by women who ever experienced severe physical violence. Ever-married women who report having experienced emotional violence, less severe physical violence, or sexual violence from a husband are about equally likely to report ever having bruises and aches (23-29 percent), injuries or broken bones (5-7 percent), or medical treatment (5-8 percent).

Table 15.8 Physical consequences of spousal violence

Percentage of ever-married women reporting different types of physical consequences resulting from something the husband/partner did to them, by type of violence reported, Malawi 2004

Type of violence	Had bruises and aches		Had injury or broken bone		Went to a doctor or health centre		Total
	Ever	Past year ¹	Ever	Past year ¹	Ever	Past year ¹	
Emotional violence							
Ever	29.0	21.6	7.1	4.2	7.6	5.3	1,015
At least once in past year	30.1	26.6	6.5	5.2	7.9	6.6	776
Less severe physical violence^{1, 2}							
Ever	23.3	16.8	5.7	3.6	5.2	4.0	1,386
At least once in past year	28.5	27.1	6.7	5.9	7.3	6.6	838
Severe physical violence^{1, 2}							
Ever	62.0	47.0	18.5	11.0	21.2	15.0	226
At least once in past year	66.0	62.7	16.2	13.8	21.4	20.0	161
Sexual violence							
Ever	24.2	18.7	5.0	3.2	6.4	4.6	1,076
At least once in past year	24.7	22.1	4.6	3.7	6.4	5.5	872
Physical or sexual violence¹							
Ever	22.9	16.9	5.7	3.5	5.7	4.2	2,140
At least once in past year	22.9	16.9	5.7	3.5	5.7	4.2	2,140
No violence reported	0.5	0.4	0.2	0.1	0.1	0.1	5,914
Total	6.5	4.8	1.6	1.0	1.6	1.2	8,054

¹ Excludes women who experienced physical violence during pregnancy only, due to lack of information on degree of severity and/or timing of violence.

² Less severe violence includes pushing, shaking, slapping, punching and kicking, while severe violence includes trying to strangle or burn, threats with a weapon, and attacks with a weapon.

15.10 VIOLENCE BY SPOUSAL CHARACTERISTICS AND WOMEN'S INDICATORS

Since the most frequent perpetrator of spousal violence is the woman's husband, it is important to observe the characteristics of the husbands to help understand their relationship with the violence. Table 15.9 shows that women who are married to men with secondary or higher education are the least likely to experience violence of any kind. Seventy-two percent of women with husbands who have secondary or higher education have never experienced violence compared to only 66 to 68 percent of women whose husbands have a lower level of education. It is interesting to note that women who have more education than their husbands are the most likely to experience all forms of spousal violence.

experience in spousal violence, nor is there any clear pattern in the relationship between marital harmony and spousal violence. While women in the least harmonious relationships are expected to report more violence than women with more harmonious marriages, it is women with a score of one or two on the marital harmony index who are the most likely to report any kind of spousal violence.

Table 15.10 Spousal violence by women's status

Percentage of ever-married women by the type of spousal violence by the current or most recent husband, by time of violence, by selected indicators of women's status, Malawi 2004

Women's status indicator	Emotional violence		Physical violence		Sexual violence		Physical or sexual violence		Never experienced violence	Number of women
	Ever	Past year ¹	Ever	Past year ²	Ever	Past year ²	Ever	Past year ²		
Woman can refuse sex to husband										
Yes to all reasons	11.8	8.6	22.2	11.6	13.0	10.6	28.4	17.9	68.2	4,271
No to one or more reasons	13.7	10.7	22.0	13.3	13.8	11.1	28.2	19.2	68.3	3,783
Number of decisions in which woman has final say										
0	11.5	8.8	19.7	11.1	10.6	7.8	25.4	15.3	71.6	1,435
1-2	12.2	9.8	21.7	12.9	15.0	12.9	29.1	20.8	67.5	3,734
3-4	13.9	9.7	23.8	12.4	12.7	9.7	28.8	17.1	67.6	2,885
Index of marital harmony³										
Least harmonious	16.2	12.1	25.5	15.4	14.7	12.1	29.6	19.3	67.4	1,169
1-2 positive	21.0	15.6	31.4	19.2	19.8	15.2	38.8	26.3	56.7	1,259
3-4 positive	10.1	7.7	19.3	10.3	11.6	9.6	25.8	16.6	71.0	5,625
Family structure⁴										
Nuclear	12.6	10.0	22.8	13.3	13.1	11.0	28.6	19.2	68.0	5,357
Non-nuclear	12.9	8.7	20.7	10.7	13.9	10.5	27.8	17.0	68.8	2,697
Total	12.7	9.6	22.1	12.4	13.4	10.8	28.4	18.5	68.3	8,054

¹Excludes women who have been married more than once and say they have been beaten only by a previous husband only during pregnancy.

²Excludes currently married women who have experienced physical violence only during pregnancy by their current husband and formerly married women who have been beaten only during pregnancy by their last husband from experienced physical violence.

³The index of marital harmony is the sum of responses to questions about spending his free time with the respondent, consulting her on various household matters, being affectionate to the respondent, and respecting the respondent's wishes, for which the respondent says that her husband acted frequently.

⁴A woman is considered to be in a nuclear family if the woman lives alone, lives with her husband, or lives with her husband and children.

15.11 HELP SEEKING FOR WOMEN WHO EXPERIENCE VIOLENCE

Data in previous tables show that women experience violence mainly from husbands. Table 15.11 shows that some women who experience violence from their partners seek help from relatives such as their own families, in-laws, and other relatives or friends. Less than half of women who experienced violence sought help (42 percent). Forty-four percent of women sought help from other relatives or friends, one in three went to their own family, and 11 percent went to their in-laws.

While women who are abused by their husbands tend to go to other relatives or friends for help, women whose perpetrator is not her husband tend to seek help from their own family.

The likelihood that a woman seeks help in domestic violence depends on the perpetrator. Women who were abused by their previous husbands are the most likely to have sought help (52 percent). These data suggest that domestic violence may be a contributing cause for divorce or separation. Women whose perpetrators are not their spouse are the least likely to seek help. The probability of seeking help increases with the frequency of violence. While 49 percent of women who experienced physical or sexual violence four or more times in the past year sought help, the corresponding proportion for women with one experience of violence in the last year is 40 percent.

Table 15.11 Help seeking for women who experience violence									
Among women who reported ever experiencing physical or sexual violence, percentage who tried to get any help, and among those who sought help, persons from whom help was sought, by person who perpetrated the violence, Malawi 2004									
Aspects of violence	Percentage who sought help	Number of women who experienced violence	Persons from whom help was sought						Number of women who sought help
			Own family	In-laws	Other relatives/friends	Medical personnel	Other officials	Other	
Persons perpetrating violence									
Husband only	41.3	1,545	24.2	14.7	56.7	1.6	3.2	17.2	638
Earlier husband only	52.3	361	21.0	18.3	56.8	3.1	6.4	14.5	189
Husband and others	47.1	348	20.1	9.0	45.4	5.5	9.3	24.6	164
Others only	37.1	908	59.0	1.4	10.9	3.8	5.3	29.3	337
Frequency of beatings in past year									
0 times	39.9	1,465	35.3	11.2	36.2	3.1	2.7	23.4	584
1 time	40.1	610	35.3	10.6	44.7	2.3	3.3	19.5	245
2-3 times	44.3	608	28.8	10.4	52.8	1.8	7.1	17.0	270
4+ times	49.0	364	21.0	13.4	57.7	3.2	7.2	19.7	179
DK frequency ¹	42.9	116	33.8	8.1	27.7	6.7	19.2	20.4	50
Total	41.9	3,164	32.0	11.1	43.7	2.8	4.9	20.8	1,327

¹ Includes four women for whom data on frequency of beatings is missing. The remaining cases are women beaten only during pregnancy for which data on frequency of beating in the past year was not collected.

Mylon Mahowe and Sophie Kang'oma

The 2004 MDHS collected information on men's participation in their wives and children's health care. This information enables family planning and health programme managers to gauge men's role in taking care of the health of their family. In Malawi, where maternal mortality is high, this information will help health programmers to advise men on care necessary for mothers during pregnancy, delivery, and the postpartum period.

In the 2004 MDHS, male respondents who had fathered a child born in the five years preceding the survey were asked a series of questions on the care for the child's mother during pregnancy, delivery, and during the six weeks after delivery. These men were also asked various questions related to their child's health care and their knowledge of reproductive health.

16.1 ADVICE OR CARE RECEIVED BY MOTHER DURING PREGNANCY, DELIVERY, AND AFTER DELIVERY

Table 16.1 presents, based on the father's report, the percentage of last births in the five years preceding the survey for which mothers received advice or care from a health care provider, by type of advice or care and father's background characteristics. The data show that 96 percent of fathers report that mothers of their last child received antenatal care, 74 percent report that care was received during delivery, and 80 percent say that the mother received care during the six weeks after delivery.

Father's reporting receipt of antenatal, delivery and postnatal care does not differ consistently by age. Fathers in urban areas and fathers with more education are more likely to report that their child's mother received care during and after delivery. Wealth index does not have a strong relationship with father's reporting of receipt of antenatal care for their last birth. However, fathers in the highest wealth quintile are more likely than fathers in the lower wealth quintiles to report that the mother of their last child received delivery care and care after delivery.

Fathers in the Central Region are slightly more likely than fathers in other regions to report advice or care during pregnancy and delivery. Among the oversampled districts, reporting of antenatal care varies little. However, the proportion of fathers reporting that a health care provider attended their child's delivery ranged from 61 percent in Salima to 87 percent in Mulanje and the percentage of fathers reporting postnatal care during the six weeks after delivery ranges from 56 percent in Kasungu to 92 percent in Blantyre.

It is interesting to compare the reports of fathers to those of women who gave birth in the five years before the survey. For antenatal care, 96 percent of fathers report that the mother of their last child received care from a health professional, compared to 93 percent of women (see Chapter 9). For delivery assistance by a health care provider, the figures are more discrepant—74 percent for fathers compared to 57 percent from mothers. Differences in question wording could account for some of the difference. It should also be noted that fathers and mothers are not necessarily reporting on the same children.

Table 16.1 Care received by mother during pregnancy, delivery, and after delivery

Percentage of men who fathered a child in the five years preceding the survey who report that the mother of the most recent birth received care from a health care provider during pregnancy, delivery and postpartum, by father's background characteristics, Malawi 2004

Background characteristic	During pregnancy	During delivery	During the six weeks after delivery	Number of fathers
Age				
15-19	*	*	*	10
20-24	97.4	73.6	81.1	212
25-29	97.4	76.1	80.1	435
30-34	95.3	74.7	80.6	369
35-39	95.0	72.9	74.7	213
40-44	97.5	71.1	83.9	183
45-54	93.7	70.2	81.4	148
Residence				
Urban	96.5	87.0	91.9	253
Rural	96.2	71.4	77.7	1,317
Region				
Northern	95.7	71.4	69.1	189
Central	96.0	67.6	73.3	675
Southern	96.6	80.6	89.3	706
District				
Blantyre	95.3	84.0	92.1	127
Kasungu	94.2	65.6	56.2	77
Machinga	97.0	79.1	84.8	57
Mangochi	97.5	68.4	90.1	84
Mzimba	95.2	67.3	58.4	103
Salima	97.6	61.3	79.4	43
Thyolo	97.0	73.7	90.7	87
Zomba	99.1	73.2	84.6	76
Lilongwe	94.5	64.9	73.5	236
Mulanje	94.9	87.0	76.6	54
Other districts	96.8	77.5	83.0	627
Education				
No education	94.7	64.4	75.0	255
Primary 1-4	96.4	68.9	75.8	412
Primary 5-8	96.0	76.4	80.7	559
Secondary+	97.5	83.1	87.7	342
Wealth quintile				
Lowest	95.3	69.2	75.8	208
Second	95.3	67.7	74.0	347
Middle	96.5	71.7	77.1	393
Fourth	96.2	74.7	82.7	347
Highest	97.5	87.4	91.6	276
Total	96.2	73.9	80.0	1,570

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

16.2 MAIN PROVIDER DURING PREGNANCY, DELIVERY, AND AFTER DELIVERY

Information on the main provider of payment for services received from a health care provider during pregnancy, delivery, and six weeks after delivery provides insight into the financial arrangements for reproductive health services among Malawian families. This information is also useful in finding out why mothers do not receive advice or care during and after delivery.

Table 16.2 shows, based on father's report, the percentage of last births in the five years preceding the survey for which mothers received care from a health care provider, by the main provider of payment for services during pregnancy, delivery and six weeks after delivery. The majority of fathers report that maternal care services were free: 76 percent receive free antenatal services, 66 percent receive free care during delivery, and 86 percent receive care free of cost during the six weeks after delivery. Fathers reported providing payment for antenatal care for 19 percent of all births receiving antenatal care, 27 percent paid for delivery care themselves, and 12 percent paid out of pocket for services during the six weeks after delivery.

Table 16.2 shows that insurance pays for only a small proportion of services received before, during and after delivery: 1 percent for antenatal care, 3 percent for delivery, and 1 percent for care during six weeks after delivery.

Main provider of payment	During pregnancy	During delivery	During the six weeks after delivery
Free	76.4	66.4	85.6
Insurance	1.4	3.0	1.0
Respondent	19.4	27.3	11.8
Child's mother	0.4	0.3	0.4
Respondent and child's mother	0.4	0.5	0.5
Respondent's family	0.2	0.6	0.2
Child's mother's family	0.4	0.4	0.4
Other	0.2	0.4	0.0
Missing	1.2	0.9	0.1
Total	100.0	100.0	100.0
Number	1,510	1,160	1,256

16.3 REASONS FOR NOT GETTING CARE DURING PREGNANCY, DELIVERY, AND AFTER DELIVERY

Table 16.3 shows reasons for lack of care for mothers during pregnancy, delivery and after delivery based on father's report. This information is important for health care providers to know why mothers are not receiving advice or care from a health care provider and may help policy makers to intervene with relevant policies and programs in the area. Data on reasons for lack of care during

the antenatal period is based on a small number of cases, requiring caution in interpreting the figures.

It is interesting to note that half of fathers say that distance to a health facility is the major problem for getting care for delivery; 33 percent of fathers cite the same obstacle for obtaining antenatal care. It is worth noting that 44 percent of fathers say that their child's mother did not get care after delivery because they do not think that the care is necessary. Overall, more than one fifth of fathers say that lack of knowledge of the importance of care during the antenatal, delivery and postpartum periods is the main reason why women are not getting care in this period.

Table 16.3 Reason for not getting care during pregnancy, delivery, and after delivery

Percentage of last births in the five years preceding the survey for which mothers did not receive advice or care from a health care provider (based on father's report), by reason for not getting care during pregnancy, delivery and six weeks after delivery, Malawi 2004

Reason	During pregnancy	During delivery	During the six weeks after delivery
Not necessary	(10.1)	10.0	43.7
Not customary	(2.2)	1.8	2.0
Respondent did not allow	(3.3)	0.6	1.3
Too costly	(12.4)	4.3	4.6
Too far, no transport	(32.7)	50.1	16.7
Poor service	(0.0)	3.1	1.6
Lack of knowledge	(27.7)	21.3	24.0
Other	(11.7)	8.2	6.2
Missing	(0.0)	0.6	0.0
Total	100.0	100.0	100.0
Number	46	393	279

Note: Figures in parentheses are based on 25-49 unweighted cases.

16.4 DECISIONMAKING ON CHILD'S HEALTH CARE

The 2004 MDHS also collected information from fathers on who usually decides what to do when a child is ill. This question was asked of men for their youngest child under five who lives with them. The findings are presented in Table 16.4. The data show that fathers and mothers are the main decisionmakers on their child's health care in case of illness. Fathers make decisions for 87 percent of the children, while mothers make decisions for 64 percent of the children. Female and male relatives decide for the health care of 3-4 percent of children.

The age of the child's father is not strongly related to the decisionmaker of the child's health. However, female and male relatives are likely to make decisions on a child's health when the child's father is young (20-29). Decisionmaking on the health care of the child is more likely to be carried out by the child's father in rural areas and by the child's mother in urban areas. In urban areas, female and male relatives and other persons are more likely to have a say in the health care of the child than in rural areas.

The data show that father's role in their child's health care decreases with education. For example, 90 percent of fathers with no education make decisions on their child's health care compared with 81 percent of fathers with at least secondary education. Similarly, the father's role in making decisions on his child's health is negatively related to his wealth status; fathers in the highest wealth quintile are less likely to make decisions on their child's health than fathers in the lower wealth quintiles. The mother's influence in decisionmaking largely fills the gap.

At the district level, more than 90 percent of fathers in Mangochi, Machinga and Mulanje decide on what to do when their children are sick. Fathers in Blantyre and Zomba are less likely to make decisions about health care when their child is sick (less than 80 percent). The role of mothers in making decisions on their children's treatment ranges from 85 percent in Mulanje to less than 50 percent in Thyolo, Salima, and Mangochi.

16.5 MEN'S KNOWLEDGE OF PREGNANCY COMPLICATIONS

In the 2004 MDHS, male respondents were asked about their knowledge about pregnancy complications. Table 16.5 shows the results. The data show that two in three men (65 percent) have no knowledge of any signs or symptoms that indicate that the pregnancy may be in danger. The most often cited sign of pregnancy complication is vaginal bleeding (11 percent). Abdominal pain and swelling of hands and feet are mentioned by 8 percent each of men, while high fever and difficult labour are mentioned by 7 percent and 6 percent of men, respectively.

As expected, older men are more likely to know about pregnancy complications. The percentage of men with no knowledge of pregnancy complications declines with increasing age. Never married men, who are presumably young, are the most likely to not know any pregnancy complications (82 percent).

However, a man's knowledge of signs of pregnancy complications increases with his education. Table 16.5 shows that men with secondary or higher education are the most knowledgeable of signs of pregnancy complications, while men with no education are the least knowledgeable. This is true for all signs of complications except prolonged labour. The percentage of men who mention this problem ranges from 8 percent for men with no education to 6 percent for men with secondary and higher education.

be better educated and have better access to information than their counterparts in the rural areas (63 percent). Men in the Northern Region are more likely to have no knowledge of pregnancy complications (74 percent) than men in Central Region (68 percent) and Southern Region (61 percent).

Men's knowledge of pregnancy complications is inconsistent across wealth status quintiles, except on vaginal bleeding. Men in the highest wealth quintile are more likely to mention this problem than other men.

In general, knowledge of pregnancy complications among men in the most urbanised districts in Malawi is limited. Few men in Blantyre and Lilongwe know about high fever (1 percent and 2 percent, respectively), and only 3 percent know about prolonged labour. Knowledge of pregnancy complications is much higher in less urbanised districts. For example, vaginal bleeding is known to 22 percent of men in Thyolo, compared to only 6 percent in Lilongwe and Salima. High fever is highly recognised among men in Mulanje district (29 percent).

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A.1 SAMPLE DESIGN

The primary objective of the 2004 Malawi Demographic and Health Survey (MDHS) is to provide estimates with acceptable precision for important population characteristics such as fertility, contraceptive prevalence, selected health indicators, and infant mortality rates.

Administratively, Malawi is divided into twenty-seven districts. In turn, each district is sub-divided into smaller administrative units. In 1998, the National Statistical Office (NSO) carried out a Housing and Population Census. In the census, each administrative unit was sub-divided into enumeration areas (EAs), which is totally classified as urban or rural. For each EA, a sketch map was drawn. The sketch shows the EA boundaries, location of buildings, and other landmarks. The list of EAs serves as the frame for the 2004 MDHS sample.

The 2004 MDHS is designed to present important characteristics for Malawi as a whole, urban and rural areas separately, and each of ten large districts. These districts are: Blantyre, Kasungu, Machinga, Mangochi, Mzimba, Salima, Tyolo, Zomba, Lilongwe, and Mulanje. In the interest of presenting estimates for the remaining 17 districts in Malawi in as much breakdown as possible, these districts are grouped as follows:

- Group 1: The rest of the Northern region (Chitipa, Karonga, Rumphi, Likoma, and Nkhata Bay)
- Group 2: Dowa, Dedza, and Nkhatakota
- Group 3: Mchinji and Ntchisi
- Group 4: Mwanza, Chikwawa, and Nsanje
- Group 5: Phalombe and Chiradzulu
- Group 6: Balaka and Ntcheu

A.1.1 Sample Allocation

The target sample for the 2004 MDHS sample is about 15,140 households. Based on the level of non-response found in the 2000 MDHS, approximately 13,000 women with completed interviews are expected to be obtained. A sample of households will be selected from each EA, and all women age 15 to 49 identified in these households were interviewed. One in every three sampled households was selected for the male survey and HIV testing. All men age 15-54 in these households are eligible for individual interview. The selected households will be distributed in 522 EAs, 64 in the urban and 458 in the rural areas.

A.1.2 Sample Selection

The 2004 MDHS sample will be selected using a stratified two-stage cluster design. In each domain, the clusters are selected with a probability proportional to household size (based on the 1998 census). An average of 29 households will be selected in each cluster. The selection is done using the following formula:

$$P_{1i} = (b * M_i) / (\sum_i M_i)$$

where

b : is the number of clusters selected in DHS sample for a given domain,

M_i : is the number of households of the i -th EA reported in the 1998 census information,

$\sum M_i$: is the number of households in the given domain according to the 1998 census information.

If a selected PSU contains two or more standard segments, then segmentation is recommended to choose only one segment with equal probability. Complete household listing is to be implemented in each segment. Households will be selected to achieve a self-weighted sampling fraction in each domain. However, since the 2004 MDHS sample is not proportional among domains, a final adjustment procedure (using weights) is necessary to provide estimates for each domain.

In a given domain, if

1. the overall sampling fraction (f) has been calculated,
2. s_{2i} is the number of segments in the selected cluster, and
3. c_i is the number of households selected out of the total households (L_i) found in the 2004 MDHS listing for the i -th cluster,

then the self-weighting condition can be expressed as

$$f = P_{1i} * (1/s_{2i}) * (c_i / L_i)$$

The final number of households in the i -th cluster can be calculated as

$$c_i = (f * L_i) / (P_{1i} * (1/s_{2i}))$$

and the household selection interval for the i -th cluster is

$$L_i = L_i / c_i$$

$$L_i = (P_{1i} * (1/(s_{2i}))) / f$$

A.1.3 Sample Implementation

The results of the sample implementation for the households and the individual interviews are shown in Tables A.1. The results indicate that 15,041 potential households were selected. Of these, the 2004 MDHS fieldwork teams successfully completed interviews in 13,664 households, yielding a household response rate of 98 percent. The main reasons for failure to interview were because the dwelling was vacant or the address was not a dwelling (4 percent). The household response rate varies little across region and urban-rural residence.

Table A.1 Sample implementation: women						
Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall response rates, according to urban-rural residence and region, Malawi 2004						
Result	Residence		Region			Total
	Urban	Rural	Northern	Central	Southern	
Selected households						
Completed (C)	86.9	91.4	91.4	91.0	90.6	90.8
Household present but no competent respondent at home (HP)	2.3	1.1	1.0	1.2	1.3	1.3
Postponed (P)	0.1	0.0	0.0	0.0	0.0	0.0
Refused (R)	1.0	0.4	0.1	0.2	0.8	0.5
Dwelling not found (DNF)	0.5	0.2	0.2	0.4	0.2	0.2
Household absent (HA)	2.2	1.3	1.9	1.0	1.6	1.4
Dwelling vacant/address not a dwelling (DV)	6.0	4.1	3.6	4.4	4.5	4.4
Dwelling destroy (DD)	1.1	1.3	1.7	1.7	1.0	1.3
Other (O)	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	1,984	13,057	1,772	5,443	7,826	15,041
Household response rate (HRR) ¹	95.8	98.1	98.5	98.0	97.6	97.8
Eligible women						
Completed (EWC)	94.6	95.8	95.3	95.2	96.1	95.7
Not at home (EWNH)	2.3	2.1	2.9	2.2	1.8	2.1
Postponed (EWP)	0.1	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	1.7	0.8	0.7	1.0	1.0	1.0
Partly completed (EWPC)	0.4	0.4	0.2	0.5	0.3	0.4
Incapacitated (EWI)	0.8	0.8	0.8	1.0	0.6	0.8
Other (EWO)	0.1	0.1	0.1	0.2	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,733	10,496	1,676	4,411	6,142	12,229
Eligible women response rate (EWRR) ²	94.6	95.8	95.3	95.2	96.1	95.7
Overall response rate (ORR) ³	90.7	94.0	93.9	93.3	93.8	93.6

¹ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$100 * \frac{C}{C + HP + P + R + DNF}$$

² Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$100 * \frac{EWC}{EWC + EWNH + EWP + EWR + EWPC + EWI + EWO}$$

³ The overall response rate (ORR) is calculated as: $ORR = HRR * EWRR/100$

Table A.2 Sample implementation: men

Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men and overall response rates, according to urban-rural residence and region Malawi 2004

Result	Residence		Region			Total
	Urban	Rural	Northern	Central	Southern	
Selected households						
Completed (C)	87.2	91.7	91.2	92.1	90.3	91.1
Household present but no competent respondent at home (HP)	2.4	1.1	1.0	1.2	1.3	1.2
Postponed (P)	0.2	0.0	0.0	0.1	0.0	0.0
Refused (R)	1.2	0.5	0.0	0.2	1.0	0.6
Dwelling not found (DNF)	0.8	0.3	0.3	0.6	0.2	0.3
Household absent (HA)	2.3	1.4	1.9	1.0	1.9	1.6
Dwelling vacant/address not a dwelling (DV)	5.3	3.7	3.7	3.4	4.3	3.9
Dwelling destroy (DD)	0.8	1.4	1.9	1.5	1.0	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	663	4,366	593	1,816	2,620	5,029
Household response rate (HRR) ¹	95.1	98.0	98.5	97.8	97.3	97.7
Eligible men						
Completed (EMC)	80.2	87.0	88.5	88.6	83.1	85.9
Not at home (EMNH)	14.6	8.2	8.5	7.3	10.9	9.2
Postponed (EMP)	0.2	0.0	0.0	0.0	0.1	0.1
Refused (EMR)	4.3	2.4	2.1	1.6	3.7	2.7
Partly completed (EMPC)	0.0	0.2	0.0	0.2	0.2	0.2
Incapacitated (EMI)	0.2	1.2	0.8	1.3	0.9	1.0
Other (EMO)	0.6	1.0	0.0	1.1	1.1	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	632	3,165	515	1,424	1,858	3,797
Eligible men response rate (EMRR) ²	80.2	87.0	88.5	88.6	83.1	85.9
Overall response rate (ORR) ³	76.3	85.3	87.3	86.6	80.9	83.9

¹ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$100 * \frac{C}{C + HP + P + R + DNF}$$

² Using the number of eligible men falling into specific response categories, the eligible woman response rate (EMRR) is calculated as:

$$100 * \frac{EMC}{EMC + EMNH + EMP + EMR + EMPC + EMI + EMO}$$

³ The overall response rate (ORR) is calculated as: $ORR = HRR * EMRR/100$

In the interviewed households, 12,229 eligible women were identified, of whom 96 percent were successfully interviewed. The overall individual women's response rate was 94 percent (Table A.1). This rate varies some across the urban and rural areas (91 percent and 94 percent, respectively), but does not vary across regions.

A total of 3,797 men were eligible for individual interview. However, interviews were completed for only 3,261 men. For eligible men, the overall response rate is much lower than that for women (84 percent). The main reasons for failure to interview men were because the men were not at home when the MDHS team visited the EA (9 percent). This is particularly true in urban areas (14 percent).

A.2 FIELDWORK AND DATA ANALYSIS

A.2.1 Recruitment of Field Staff

NSO recruited the field staff through its regional offices in Mzuzu, Lilongwe, and Blantyre. The candidates were interviewed and selection of successful applicants was done at NSO Headquarters in Zomba by the Survey Director assisted by the human resource personnel. A total of 180 people were recruited for the survey; 30 were NSO permanent staff and the remaining 150 were temporary workers. Of the temporary workers, 40 have medical background.

A.2.2 Field Staff Training

Training for the field staff was conducted at Magomero Training Center which provided class rooms, accommodation and meals. The training lasted for 5 weeks from August 23 to October 1, 2004. The training was done in two stages. In the first stage, the training was specifically conducted for field staff who were going to be assigned to do the collection of blood samples for anemia and HIV testing. The participants include 34 persons (25 females and 9 males) with medical background, and 16 women and 10 men with no medical background. The training in blood sample collection was conducted by Dr. Ben Chilima of the Community Health Sciences Unit (CHSU), Ministry of Health (MOH). He was assisted by three laboratory technicians: M. Yasin from CHSU, J. Gondwe of Lilongwe Central Hospital, and A. Kashoti of Mzuzu Central Hospital.

In the following four weeks, the 60 persons who were trained in taking blood samples were joined by 109 people who are being trained to be interviewers. The training is patterned after standard DHS training procedures, including class lectures, talk by resource persons, demonstration and practice interviews, and written examinations. To enhance the participants' knowledge on issues covered in the questionnaires, guest lecturers are invited, to either give a presentation on specific subjects or facilitate in the training as resource persons. Training on interviewing procedures was conducted by CSO senior staff (E. Phiri, J. Kaphuka, D. Zanera, S. Kang'oma, M. Mwale) and W. Kazembe of MOH. Sri Poedjastoeti and Adrienne Cox of ORC Macro facilitated the questionnaire training.

Apart from class work, field practices in interviews and taking blood samples were also conducted. Since class exercises did not include taking blood from children, field staff assigned to do blood work was taken to health facilities to practice with children.

The participants were also be trained in the use of the Global Positioning System (GPS) unit, which identified the location of the sample points in the Geographic Information System (GIS).

Fieldwork

Prior to the visit of the interviewing teams to the selected EAs, NSO sent listing teams whose main task was to list all households residing in these EAs. The listing teams were also instructed to draw a sketch map which include the EA boundaries and all structures found in the EA.

In addition to listing households in the selected EAs, the listing teams were entrusted with two additional tasks; 1) informing local authorities about the implementation of MDHS, including

the drawing blood samples for anemia and HIV testing and 2) to obtain information on the estimate the transportation cost from the EA to the nearest VCT facility.

Data was collected by 22 mobile teams. Each team comprises one supervisor, one field editor, four female interviewers, one male interviewer, and a driver. Quality control was assured through supervision and monitoring of teams during fieldwork. The supervisor and field editor held work sessions frequently with their team, with the goal of reinforcing the training received and correcting all data collection errors.

Five senior NSO staff and one senior MOH staff coordinated and supervised the field activities. The three laboratory technicians supervised the blood sample collection to assure that collection of blood samples was done properly.

Specially designed tables were run once a week by NSO during fieldwork to check the data that were entered. Any problems that appear from review of these tables were discussed with the appropriate teams, and attempts will be made to ensure that they do not persist. The field checks tables included data necessary to monitor the response rates for anemia and HIV testing.

Social Mobilization

In order to ensure a successful survey, the public was informed about the survey, particularly because for the first time the survey includes taking blood samples from the respondents. Social mobilization started with the household listers who were instructed to meet with Districts Commissioners, Traditional Authorities and other local community leaders to inform them about the survey, particularly about the collection of blood samples for HIV testing.

Publicity of the survey during data collection included using the mass media: press releases in daily newspapers, radio slots, radio drama (Pamajiga). In addition, meetings were held with district assembly staff, chiefs of the areas, and representatives of the local governments of areas that had been selected in the survey.

Data Processing

Completed questionnaires were sent to NSO headquarters in Zomba for processing. Data processing commenced on 24th November 2004. The questionnaires are entered, verified, and edited using Census and Survey Processing System (CSPro), a computer package developed by ORC Macro and U.S. Bureau of Census.

About 39 people working in two shifts were involved in the data process activities that include registry, editing and data keying, and secondary editing. Data processing was completed on 30th May 2005.

A.3 CHARACTERISTICS OF THE SAMPLE

This section covers how representative the achieved sample is of the population and the interrelationships among key explanatory variables. The evaluation of how representative the achieved sample is of the population can be made by comparison with other sources of information. The age, residential, and educational characteristics of the sample are probably the most important aspects to discuss with regard to representation.

ESTIMATES OF SAMPLING ERRORS

Appendix B

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2004 Malawi Demographic and Health Survey (MDHS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2004 MDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2004 MDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2004 MDHS is the ISSA Sampling Error Module. This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y , and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[\frac{m_h}{m_{h-1}} \left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}, \text{ and } z_h = y_h - rx_h$$

where b represents the stratum which varies from 1 to H ,
 m_b is the total number of clusters selected in the b^{th} stratum,
 y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the b^{th} stratum,
 x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the b^{th} stratum, and
 f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers all but one cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2004 MDHS, there were 522 non-empty clusters. Hence, 521 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^k (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 522 clusters,
 $r_{(i)}$ is the estimate computed from the reduced sample of 521 clusters (i^{th} cluster excluded), and
 k is the total number of clusters.

In addition to the standard error, ISSA computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2004 MDHS are calculated for selected variables considered to be of primary interest for woman's survey and for man's surveys, respectively. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the 11 regions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.18 present the value of the statistic (R), its standard error (SE), the number of unweighted (N-UNWE) and weighted (N-WEIG) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ($R \pm 2SE$), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of

unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to child-bearing.

The confidence interval (e.g., as calculated for children ever born to women aged 40-49) can be interpreted as follows: the overall average from the national sample is 6.550 and its standard error is 0.080. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $6.550 \pm 2 \times 0.080$. There is a high probability (95 percent) that the true average number of children ever born to all women aged 40 to 49 is between 6.391 and 6.709.

Sampling errors are analyzed for the national woman sample and for two separate groups of estimates: (1) means and proportions, and (2) complex demographic rates. The relative standard errors (SE/R) for the means and proportions range between 0.2 percent and 34.2 percent with an average of 3.47 percent; the highest relative standard errors are for estimates of very low values (e.g., currently using IUD). If estimates of very low values (less than 10 percent) were removed, then the average drops to 1.81 percent. So in general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. The relative standard error for the total fertility rate is small, 1.7 percent. However, for the mortality rates, the average relative standard error is much higher, 5.16 percent.

There are differentials in the relative standard error for the estimates of sub-populations. For example, for the variable want no more children, the relative standard errors as a percent of the estimated mean for the whole country and for the urban areas are 1.7 percent and 5.0 percent, respectively.

For the total sample, the value of the design effect (DEFT), averaged over all variables, is 1.351 which means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.351 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Malawi 2004		
Variable	Estimate	Base Population
WOMEN		
Urban residence	Proportion	All women
Literate	Proportion	All women
No education	Proportion	All women
Secondary education or higher	Proportion	All women
Net attendance ratio for primary school	Ratio	Children 7-12 years
Never married	Proportion	All women
Currently married/in union	Proportion	All women
Married before age 20	Proportion	Women age 20-49
Currently pregnant	Proportion	All women
Children ever born	Mean	All women
Children surviving	Mean	All women
Children ever born to women age 40-49	Mean	Women age 40-49
TFR (0-3 years)	Rate	All women
Knows any contraceptive method	Proportion	Currently married women
Ever used any contraceptive method	Proportion	Currently married women
Currently using any contraceptive method	Proportion	Currently married women
Currently using a modern method	Proportion	Currently married women
Currently using pill	Proportion	Currently married women
Currently using IUD	Proportion	Currently married women
Currently using condom	Proportion	Currently married women
Currently using female sterilization	Proportion	Currently married women
Currently using periodic abstinence	Proportion	Currently married women
Obtained method from public sector source	Proportion	Current users of modern methods
Want no more children	Proportion	Currently married women
Want to delay birth at least 2 years	Proportion	Currently married women
Ideal family size	Mean	All women 15-49
Neonatal mortality (0-4 years)	Rate	Children exposed to the risk of mortality
Postneonatal mortality (0-4 years)	Rate	Children exposed to the risk of mortality
Infant mortality (0-4 years)	Rate	Children exposed to the risk of mortality
Infant mortality (5-9 years)	Rate	Children exposed to the risk of mortality
Infant mortality (10-14 years)	Rate	Children exposed to the risk of mortality
Child mortality (0-4 years)	Rate	Children exposed to the risk of mortality
Under five mortality (0-4 years)	Rate	Children exposed to the risk of mortality
Mothers received tetanus injection for last birth	Proportion	Births in last five years
Mothers received medical assistance at delivery	Proportion	Births in last five years
Child has diarrhoea in the 2 weeks prior to survey	Proportion	Children under 5
Treated with oral rehydration salts (ORS)	Proportion	Children with diarrhoea in two weeks before interview
Taken to a health provider	Proportion	Children with diarrhoea in two weeks before interview
Vaccination card seen	Proportion	Children age 12-23 months
Received BCG	Proportion	Children age 12-23 months
Received DPT (3 doses)	Proportion	Children age 12-23 months
Received polio (3 doses)	Proportion	Children age 12-23 months
Received measles	Proportion	Children age 12-23 months
Fully immunized	Proportion	Children age 12-23 months
Height-for-age (below -2SD)	Proportion	Children age 0-59 months
Weight-for-height (below -2SD)	Proportion	Children under 5 who were measured
Weight-for-age (below -2SD)	Proportion	Children under 5 who were measured
BMI < 18.5	Proportion	All women 15-49 who were measured
Has heard of HIV/AIDS	Proportion	All women 15-49
Knows condoms reduce HIV/AIDS	Proportion	All women 15-49
Knows limiting partners reduce HIV/AIDS	Proportion	All women 15-49
HIV positive	Proportion	All women 15-49 tested for HIV
MEN		
Urban residence	Proportion	All men 15-54
Literate	Proportion	All men 15-54
No education	Proportion	All men 15-54
Secondary education or higher	Proportion	All men 15-54
Never married	Proportion	All men 15-54
Currently married/in union	Proportion	All men 15-54
Married before age 20	Proportion	Men age 20-49
Knows any contraceptive method	Proportion	All men 15-54
Want no more children	Proportion	Currently married men 15-54
Want to delay birth at least 2 years	Proportion	Currently married men 15-54
Ideal family size	Mean	All men 15-54
Has heard of HIV/AIDS	Proportion	All men 15-54
Knows condoms reduce HIV/AIDS	Proportion	All men 15-54
Knows limiting partners reduce HIV/AIDS	Proportion	All men 15-54
HIV positive	Proportion	All men 15-49 tested for HIV

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Malawi 2004

Age	Women		Men		Age	Women		Men	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
0	1,249	4.3	1,224	4.1	36	277	1.0	239	0.8
1	1,103	3.8	1,103	3.7	37	147	0.5	131	0.4
2	889	3.1	1,003	3.3	38	201	0.7	251	0.8
3	965	3.4	963	3.2	39	163	0.6	165	0.5
4	1,007	3.5	1,059	3.5	40	321	1.1	316	1.0
5	690	2.4	773	2.6	41	138	0.5	145	0.5
6	1,041	3.6	1,077	3.6	42	224	0.8	209	0.7
7	1,053	3.7	995	3.3	43	94	0.3	132	0.4
8	976	3.4	941	3.1	44	162	0.6	167	0.6
9	797	2.8	859	2.8	45	189	0.7	164	0.5
10	1,026	3.6	1,063	3.5	46	145	0.5	170	0.6
11	681	2.4	757	2.5	47	108	0.4	129	0.4
12	979	3.4	1,041	3.5	48	122	0.4	160	0.5
13	713	2.5	825	2.7	49	92	0.3	119	0.4
14	805	2.8	806	2.7	50	164	0.6	204	0.7
15	632	2.2	480	1.6	51	112	0.4	216	0.7
16	565	2.0	508	1.7	52	160	0.6	234	0.8
17	542	1.9	462	1.5	53	71	0.2	146	0.5
18	625	2.2	598	2.0	54	142	0.5	197	0.7
19	463	1.6	523	1.7	55	179	0.6	215	0.7
20	538	1.9	702	2.3	56	198	0.7	176	0.6
21	464	1.6	592	2.0	57	105	0.4	100	0.3
22	478	1.7	701	2.3	58	121	0.4	113	0.4
23	460	1.6	463	1.5	59	109	0.4	131	0.4
24	468	1.6	577	1.9	60	159	0.6	182	0.6
25	590	2.1	585	1.9	61	77	0.3	79	0.3
26	430	1.5	452	1.5	62	128	0.4	113	0.4
27	461	1.6	391	1.3	63	66	0.2	71	0.2
28	433	1.5	457	1.5	64	97	0.3	90	0.3
29	356	1.2	363	1.2	65	114	0.4	126	0.4
30	499	1.7	387	1.3	66	39	0.1	83	0.3
31	278	1.0	236	0.8	67	43	0.1	56	0.2
32	413	1.4	392	1.3	68	100	0.3	87	0.3
33	210	0.7	243	0.8	69	60	0.2	56	0.2
34	251	0.9	258	0.9	70+	640	2.2	780	2.6
35	312	1.1	336	1.1	Don't know/ missing	11	0.0	15	0.0
					Total	28,722	100.0	30,163	100.0

Table C.2 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, interviewed women age 15-49 and men age 15-54, and percentage of eligible women and men who were interviewed (weighted), by five-year age groups, Malawi 2004

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percent	
10-14	4,492	na	na	na
15-19	2,570	2,387	20.5	92.9
20-24	3,036	2,901	24.9	95.6
25-29	2,247	2,158	18.5	96.0
30-34	1,516	1,470	12.6	97.0
25-39	1,122	1,080	9.3	96.3
40-44	970	924	7.9	95.3
45-49	743	721	6.2	97.2
50-54	998	na	na	na
15-49	12,203	11,641	100.0	95.4

Age group	Household population of men age 10-59	Interviewed men age 15-54		Percentage of eligible men interviewed
		Number	Percent	
10-14	1,457	na	na	na
15-19	781	671	20.2	85.9
20-24	697	593	17.9	85.1
25-29	753	652	19.7	86.6
30-34	561	482	14.6	86.1
25-39	348	304	9.2	87.4
40-44	323	285	8.6	88.1
45-49	206	181	5.5	87.8
50-54	176	147	4.4	83.6
55-59	272	na	na	na
15-54	3,845	3,315	100.0	86.2

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household schedule. na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Malawi 2004

Subject	Reference group	Percentage with missing information	Number of cases
Birth date	Births in the 15 years preceding the survey		
Month only		1.02	26,431
Month and year		0.05	26,431
Age at death	Deceased children born in the 15 years preceding the survey	0.13	3,960
Age/date at first union ¹	Ever-married women age 15-49	0.87	9,728
Respondent's education	All women age 15-49	0.01	11,698
Diarrhoea in last 2 weeks	Living children age 0-59 months	1.47	9,777
Anthropometry	Living children age 0-59 months (from the household questionnaire)		
Height		12.11	10,539
Weight		9.36	10,539
Height or weight		12.24	10,539
Anaemia			
Children	Living children age 6-59 months (from the household questionnaire)	31.99	3,195
Women	All women (from the household questionnaire)	29.35	4,057

¹ Both year and age are missing.

The purpose of Table C.3 is to examine the amount of missing information for certain key indicators. High levels of missing data may indicate that the non-missing data are biased or of poor quality.

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living (L), dead (D), and total (T) children (weighted), Malawi 2004

Calendar year	Number of births			Percentage with complete birth date ¹			Sex ratio at birth ²			Calendar year ratio ³		
	L	D	T	L	D	T	L	D	T	L	D	T
2004	2,160	114	2,274	100.0	100.0	100.0	101.9	141.2	103.5	na	na	na
2003	2,239	166	2,405	100.0	98.7	99.9	98.8	102.4	99.1	115.3	108.5	114.8
2002	1,723	191	1,915	99.9	100.0	99.9	92.3	125.2	95.1	86.7	96.7	87.6
2001	1,738	230	1,968	100.0	98.9	99.9	103.6	131.9	106.6	98.2	96.7	98.0
2000	1,816	285	2,101	100.0	100.0	100.0	91.1	113.5	93.9	117.9	122.9	118.6
1999	1,342	233	1,575	99.7	99.5	99.7	96.2	112.8	98.5	75.9	65.8	74.2
1998	1,718	424	2,143	98.7	93.3	97.6	100.2	128.1	105.2	121.7	143.3	125.5
1997	1,482	359	1,841	99.0	94.0	98.0	97.7	117.3	101.3	94.5	97.8	95.1
1996	1,417	310	1,727	99.0	94.5	98.2	109.5	103.8	108.5	107.9	96.4	105.7
1995	1,144	284	1,428	98.6	95.6	98.0	97.9	103.3	98.9	79.4	87.1	80.9
2000-2004	9,676	986	10,662	100.0	99.5	99.9	97.6	120.7	99.6	na	na	na
1995-1999	7,103	1,610	8,713	99.0	95.0	98.3	100.3	114.0	102.7	na	na	na
1990-1994	5,613	1,361	6,974	98.7	96.2	98.2	93.8	98.6	94.7	na	na	na
1985-1989	3,405	1,053	4,458	98.3	95.9	97.7	110.0	121.2	112.5	na	na	na
< 1985	3,276	1,339	4,615	98.8	96.5	98.2	100.6	113.8	104.2	na	na	na
All	29,073	6,348	35,421	99.2	96.4	98.7	99.2	112.6	101.5	na	na	na

NA = Not applicable

¹ Both year and month of birth given

² $(B_m/B_f) \times 100$, where B_m and B_f are the numbers of male and female births, respectively

³ $[2B_x / (B_x - 1 + B_x + 1)] \times 100$, where B_x is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Malawi 2004

Age at death (days)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1	85	131	79	40	335
1	52	63	48	28	191
2	27	32	25	8	93
3	15	35	19	12	81
4	8	15	15	6	45
5	10	18	20	11	59
6	6	6	7	7	26
7	31	46	38	14	129
8	9	7	3	6	24
9	3	10	3	0	16
10	3	3	4	2	12
11	1	0	0	3	4
12	0	2	1	2	5
13	0	1	1	2	4
14	13	22	13	14	62
15	2	2	0	2	7
16	1	0	1	0	2
17	1	0	1	1	3
19	1	0	0	0	1
20	1	2	0	1	4
21	9	12	15	10	46
23	1	1	0	0	2
24	1	0	0	0	1
25	1	0	0	0	1
26	1	0	0	0	1
27	0	0	1	0	1
28	1	2	1	1	5
30	2	6	5	0	13
31+	0	0	1	0	1
Total 0-30	286	417	300	169	1,171
Percent early neonatal ¹	71.5	72.1	71.5	65.9	70.9

¹ (0-6 days/0-30 days) * 100

Table C.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for five-year periods of birth preceding the survey, Malawi 2004

Age at death (months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1 ^a	289	422	303	169	1,183
1	69	51	37	26	183
2	36	58	42	36	173
3	34	57	54	22	168
4	45	70	45	22	180
5	52	37	30	19	139
6	56	74	45	36	211
7	32	54	25	35	146
8	49	58	50	20	177
9	50	44	52	36	182
10	15	21	17	13	67
11	14	30	16	31	91
12	30	47	33	35	145
13	8	24	7	8	48
14	5	6	6	11	28
15	12	13	2	17	45
16	6	1	5	2	14
17	5	4	8	4	22
18	6	7	8	11	32
19	1	8	4	5	18
20	2	5	6	1	15
21	3	7	1	1	12
22	1	2	1	3	7
23	3	4	4	6	17
24+	1	9	3	3	16
1 Year	68	120	128	106	422
Total 0-11	742	977	716	465	2,900
Percent neonatal ¹	38.9	43.3	42.3	36.3	40.8

^a Includes deaths under one month reported in days

¹ (Deaths under one month/deaths under one year *100)

PERSONS INVOLVED IN THE 2004 MALAWI DEMOGRAPHIC AND HEALTH SURVEY

Appendix **D**

2004 Malawi Demographic and Health Survey Staff

NSO Senior Staff

C. Machinjili, Project Manager
M. Kanyuka (Mrs.), Deputy Project Manager
E. Phiri, Project Coordinator
S. Kang'oma (Mrs), Deputy Project Coordinator
J. Kaphuka, Deputy Project Coordinator
D. Zanera, Field Coordinator
M. Mwale, Field Coordinator
W. Kazembe, Field Coordinator
M. Mahowe (Mrs), Statistician

ORC Macro Staff

Anne R. Cross, Regional Coordinator for Anglophone Africa and Asia
Sri Poedjastoeti, Country Coordinator
Kiersten B. Johnson, Country Manager
Adrienne. L Cox, Country Manager
Vinod Mishra, Senior Analyst
Rathvuth Hong, Analyst
Alfredo Aliaga, Sampling Specialist
Ruilin Ren, Sampling Specialist
Jeanne Cushing, Senior Data Processing Specialist
Keith Purvis, Data Processing Specialist
Ladys Ortiz, Data Processing Specialist
Martin Wulfe, Data Processing Specialist
Elizabeth Britton, Data Processing Specialist
Livia Montana, GIS Specialist
Jasbir Sangha, Biomarker Specialist
Sidney Moore, Production Staff
Justine Faulkenburg, Production Staff

Data Processing Staff

Douglas Khumalo, Data Processing Supervisor
David Ndagonera, Data Processing Supervisor
Dorothy Dzikupi, Data Processing Supervisor

Mrs. C. Mchawa, Registry Clerk
A.S Halidi, Registry Clerk

Registry Staff

C. G. Zgambo, Senior Registry Clerk
B. Mvula, Assistant Registry Clerk
G. Hamuza, Assistant Registry Clerk
L. Chirwa, Registry Clerk
Ms. E. Ndege, Registry Clerk

Office Editors

Gift Basikolo, Senior Office Editor
Chimwemwe Kaitano, Office Editor
Simunye Nyamali, Office Editor
Zaithwa Kwaipa, Office Editor
Hendrix Nkhata, Office Editor

Data Entry Team

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Hannock Tweya, Data Entry Operator
Tikondane Matala, Data Entry Operator
Tiyamike Chifisi, Data Entry Operator
Veronica Mwale, Data Entry Operator
Watson Tembo, Data Entry Operator
Catherine Fongo, Data Entry Operator
Martin Namanja, Data Entry Operator
Dickman Galeta, Data Entry Operator
Elasma Milanzi, Data Entry Operator
Grace Matewere, Data Entry Operator
Chifundo Kalizang'oma, Data Entry Operator
Hanna Ntonya, Data Entry Operator
Yamikani Midian, Data Entry Operator
Augustine Ziwoya, Data Entry Operator
Benson Modi, Data Entry Operator
Bertha Kanyalika, Data Entry Operator
Christina Mwamadi, Data Entry Operator
Eric Sabuni, Data Entry Operator
Felix Baluwa, Data Entry Operator
Mable Chibophe, Data Entry Operator
Mphatso Gangata, Data Entry Operator
Phalod Jim, Data Entry Operator
Ms. Ester Mazunda, Data Entry Operator

Field Staff

Bloodwork Supervisors

Dr. Ben Chilima
M. Yasin
A. Kashoti
J. Gondwe

Team 1: Chitipa, Karonga, Rumphi Districts, and Mzuzu City

Mr. Watson Nyondo	Team Supervisor
Ms. Tabitha Mlotha	Field Editor
Ms. Adella Nhlema	Interviewer
Ms. Dorothy Chirwa	Interviewer
Ms Esther Mkambule	Interviewer
Ms Vinjeru Lungu	Interviewer/HT
Mr. Iton Bruce Msiska	Interviewer/HT
Mr. John Kundwe	Driver

Team 2: Mzimba District

Mr. Enwood Mlumbi	Team Supervisor
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Ms. Mirriam Chirambo	Interviewer
Ms. Dorica Simkonda	Interviewer
Ms. Lucy Mhone	Interviewer
Mr. Overton Tembo	Interviewer/HT

Ms. Luciana Simwaka	Interviewer/HT
Mr. Simon Awali	Driver

Team 3: Mzimba and Kasungu Districts

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Mr. Nelson Mutafya	Field Editor
Ms. Anne Chirwa	Interviewer
Ms. Ms. Dorothy Soko	Interviewer
Ms. Masugzo Simkonda	Interviewer
Mr. Innocent Luwanda	Interviewer/HT
Mrs. Chinula	Interviewer/HT
Mr. J. Phiri	Driver

Team 4: Kasungu and Dowa Districts

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Ms. A. Mkwezalamba	Interviewer
Ms. Sarah Kakhiwa	Interviewer
Ms. Evelyn Nyirongo	Interviewer/HT
Mr. Richard Mukwala	Interviewer/HT

Team 5: Nkata Bay, Nkhotakota, and Salima Districts

Ms. Dalitso Chikoti	Team Supervisor
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Ms. Zione Mbokola	Interviewer
Ms. Mercy Ngomba	Interviewer
Mr. Dalitso Mzinganjira	Interviewer/HT
Ms. Martha Chupa	Interviewer/HT

Team 6: Salima and Dedza Districts

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Ms. Siphwe Kapawe	Field Editor
Ms. Dora Nyirenda	Interviewer
Ms. Evelline Kazembe	Interviewer
Ms. Maureen Maseya	Interviewer
Ms. Ruth Mkhola	Interviewer/HT
Mr. M. Udedi	Interviewer/HT

Team 17: Chikwawa, Nsanje and Thyolo Districts

Ms. Maria Chakanza	Team Supervisor
Mr. Alinuswe Mwafongo	Field Editor
Ms. Yanjani Mukhuna	Interviewer
Ms. Grace Mpange	Interviewer
Ms. Janet Chibayo	Interviewer
Mr. Horace Chipula	Interviewer/HT
Ms. Evelyn Kasenda	Interviewer/HT
Mr. Leo Phillip	Driver

Team 18: Mwanza, Blantyre City, and Thyolo Districts

Mr. B. Ponyani	Team Supervisor
Ms. Eliza Nguku	Field Editor
Ms. Chrissie Matale	Interviewer
Ms. Catherine Kazembe	Interviewer
Ms. Gelyda Ndenge	Interviewer
Ms. Mary Bisika	Interviewer/HT
Mr. Steve Mphonda	Interviewer/HT
Mr. Nelson Kanjuzi	Driver

Team 19: Blantyre City and Blantyre Rural

Mr. Blazio Haleke	Team Supervisor
Ms. Gladys Mkandawire	Field Editor
Ms. Mayamiko Kachere	Interviewer
Ms. Ruth Mankhwala	Interviewer
Ms. Tereza Katunga	Interviewer
Ms. Letisia Musasa	Interviewer/HT
Mr. Ignasius Kaliwo	Interviewer/HT
Mr. P. Smoke	Driver

Team 20: Chikwawa and Thyolo Districts

Ms Tereza Mtuwa	Team Supervisor
Mr. Paxton Harawa	Field Editor
Ms. Mary Samaliya	Interviewer

Ms. Joyce Kananji	Interviewer
Ms. Joyce Dickson	Interviewer
Ms Jane Mlomba	Interviewer/HT
Mr. Dumbo Chalozza	Interviewer/HT
Mr. T. Yotamu	Driver

Team 21: Mulanje and Phalombe Districts

Ms. Jessie Chiwaya	Team Supervisor
Mr. J. Muhalu	Field Editor
Ms. Ester Mazunda	Interviewer
Ms. Rhoda Nethulu	Interviewer
Ms. Maclina Kamalo	Interviewer/HT
Ms. Susan Mbewe	Interviewer/HT
Mr. A. Katengeza	Interviewer/HT

Team 22: Mulanje and Thyolo Districts

Ms. Doreen Saka	Team Supervisor
Mr. W. Mkwanda	Field Editor
Ms. Stella Mtambalika	Interviewer
Ms. Susan Chiswe	Interviewer
Ms. Elanour Kalombe	Interviewer
Ms. Gloria Gonani	Interviewer/HT
Mr. Aubrey Kang'oma	Interviewer/HT

HT = Health Technician

MALAWI DEMOGRAPHIC AND HEALTH SURVEY 2004
MALAWI GOVERNMENT - NATIONAL STATISTICAL OFFICE
HOUSEHOLD QUESTIONNAIRE

Questionnaire Number: _____

IDENTIFICATION															
PLACE NAME _____	<table style="border-collapse: collapse; margin: auto;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>														
DISTRICT _____															
CLUSTER NUMBER															
HOUSEHOLD NUMBER															
URBAN/RURAL (URBAN=1, RURAL=2)															
LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE (LARGE CITY=1, SMALL CITY=2, TOWN=3, COUNTRYSIDE=4)															
HOUSEHOLD SELECTED FOR MALE SURVEY AND BLOOD WORK? (YES = 1, NO = 2)															
NAME OF HOUSEHOLD HEAD _____															

INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY _____ MONTH _____ YEAR _____
INTERVIEWER'S NAME	_____	_____	_____	INT.CODE _____
RESULT*	_____	_____	_____	RESULT _____
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS _____
TIME	_____	_____		
*RESULT CODES: 1 COMPLETED 2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT 3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME 4 POSTPONED 5 REFUSED 6 DWELLING VACANT OR ADDRESS NOT A DWELLING 7 DWELLING DESTROYED 8 DWELLING NOT FOUND 9 OTHER _____ (SPECIFY)				TOTAL PERSONS IN HOUSEHOLD _____ TOTAL WOMEN 15-49 _____ TOTAL MEN 15-54 _____ LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE _____

LANGUAGE OF QUESTIONNAIRE***: _____ <input style="width: 20px; height: 20px; text-align: center;" type="text" value="3"/>	NATIVE LANGUAGE OF RESPONDENT***: _____ <input style="width: 20px; height: 20px;" type="text"/>
LANGUAGE OF INTERVIEW***: _____ <input style="width: 20px; height: 20px;" type="text"/>	WAS A TRANSLATOR USED? (YES=1, NO=2) _____ <input style="width: 20px; height: 20px;" type="text"/>
*** LANGUAGE CODES: 1 CHICHEWA 2 TUMBUKA 3 ENGLISH 4 OTHER _____ (SPECIFY)	

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ <input style="width: 20px; height: 20px;" type="text"/>	NAME _____ <input style="width: 20px; height: 20px;" type="text"/>		
DATE _____ <input style="width: 20px; height: 20px;" type="text"/>	DATE _____ <input style="width: 20px; height: 20px;" type="text"/>		

HOUSEHOLD SCHEDULE

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	ELIGIBILITY					IF AGE 5-54 YEARS
				Does (NAME) usually live here?	Did (NAME) stay here last night?		How old is (NAME)?	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF WOMAN SELECTED FOR DOMESTIC VIOLENCE MODULE	CIRCLE LINE NUMBER OF ALL MEN AGE 15-54	CIRCLE LINE NUMBER OF ALL CHILDREN UNDER AGE 6	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 5-14
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8A)	(9)	(10)	(10A)	(11)
			M F	YES NO	YES NO	IN YEARS						YES NO
01		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	01	01	01	01	01	1 2
02		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	02	02	02	02	02	1 2
03		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	03	03	03	03	03	1 2
04		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	04	04	04	04	04	1 2
05		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	05	05	05	05	05	1 2
06		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	06	06	06	06	06	1 2
07		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	07	07	07	07	07	1 2
08		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	08	08	08	08	08	1 2
09		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	09	09	09	09	09	1 2
10		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	10	10	10	10	10	1 2

* CODES FOR Q. 3
RELATIONSHIP TO HEAD OF HOUSEHOLD:
01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW

07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = CO-WIFE
10 = OTHER RELATIVE
11 = ADOPTED/FOSTER/STEPCHILD
12 = NOT RELATED

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	ELIGIBILITY					IF AGE 5-54 YEARS
				Does (NAME) usually live here?	Did (NAME) stay here last night?		CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF WOMAN SELECTED FOR DOMESTIC VIOLENCE MODULE	CIRCLE LINE NUMBER OF ALL MEN AGE 15-54	CIRCLE LINE NUMBER OF ALL CHILDREN UNDER AGE 6	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 5-14	
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household	What is the relationship of (NAME) to the head of the household?*	Is (NAME) male or female?			How old is (NAME)?						Has (NAME) been very sick for at least three months during the past 12 months? By very sick, I mean that (NAME) was too sick to work or do normal activities around the house for at least three of the past 12 months.

05 = GRANDCHILD
06 = PARENT

98 = DON'T KNOW

LINE NO.	PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 18 YEARS OLD**				EDUCATION						
	Is (NAME)'s natural mother alive?	IF ALIVE	Is (NAME)'s natural father alive?	IF ALIVE	IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS				
Does (NAME)'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER		Does (NAME)'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER		Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended?*** What is the highest class (NAME) completed at that level?***	Is (NAME) currently attending school?	During the current school year, did (NAME) attend school at any time?	During the current school year, what level and class [is/was] (NAME) attending?***	During the previous school year, did (NAME) attend school at any time?	During that school year, what level and class did (NAME) attend?***	

00 = LESS THAN 1 YEAR COMPLETED
(FOR Q. 17 ONLY. THIS CODE IS
NOT ALLOWED FOR Qs. 20 AND 22)
98 = DON'T KNOW

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	ELIGIBILITY					IF AGE 5-54 YEARS
				Does (NAME) usually live here?	Did (NAME) stay here last night?		CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF WOMAN SELECTED FOR DOMESTIC VIOLENCE MODULE	CIRCLE LINE NUMBER OF ALL MEN AGE 15-54	CIRCLE LINE NUMBER OF ALL CHILDREN UNDER AGE 6	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 5-14	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8A)	(9)	(10)	(10A)	(11)
			M F	YES NO	YES NO	IN YEARS						YES NO
11		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	11	11	11	11	11	1 2
12		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	12	12	12	12	12	1 2
13		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	13	13	13	13	13	1 2
14		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	14	14	14	14	14	1 2
15		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	15	15	15	15	15	1 2
16		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	16	16	16	16	16	1 2
17		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	17	17	17	17	17	1 2
18		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	18	18	18	18	18	1 2
19		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	19	19	19	19	19	1 2
20		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	20	20	20	20	20	1 2

*CODES FOR Q. 3

RELATIONSHIP TO HEAD OF HOUSEHOLD:
 01 = HEAD
 02 = WIFE OR HUSBAND
 03 = SON OR DAUGHTER
 04 = SON-IN-LAW OR DAUGHTER-IN-LAW
 05 = GRANDCHILD
 06 = PARENT
 07 = PARENT-IN-LAW
 08 = BROTHER/SISTER
 09 = CO-WIFE
 10 = OTHER RELATIVE
 11 = ADOPTED/FOSTER/STEPCHILD
 12 = NOT RELATED
 98 = DON'T KNOW

**CODES FOR Q.12

THROUGH Q.15
 THESE QUESTIONS REFER TO THE BIOLOGICAL PARENTS OF THE CHILD.
 IN Q.13 AND Q.15, RECORD '00' IF PARENT NOT LISTED IN HOUSEHOLD SCHEDULE.
 HH ENG 6

***CODES FOR Qs. 17, 20 AND 22

EDUCATION LEVEL:
 1 = PRIMARY
 2 = SECONDARY
 3 = HIGHER
 8 = DON'T KNOW
 EDUCATION CLASS:
 00 = LESS THAN 1 YEAR COMPLETED
 (FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED)

LINE NO.	PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 18 YEARS OLD**				EDUCATION						
	Is (NAME)'s natural mother alive?	IF ALIVE Does (NAME)'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER	Is (NAME)'s natural father alive?	IF ALIVE Does (NAME)'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER	IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS				
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	Y N DK 1 2 8 ↓ ↓ 14 14		Y N DK 1 2 8 ↓ ↓ 16 16		YES NO 1 2 NEXT ↙ ↘ LINE	LEVEL CLASS [] []	YES NO 1 2 GO TO ↙ ↘ 20 21	YES NO 1 2 GO TO ↙ ↘ 20 21	LEVEL CLASS [] []	YES NO 1 2 NEXT ↙ ↘ LINE	LEVEL CLASS [] []
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

TICK HERE IF CONTINUATION SHEET USED

Just to make sure that I have a complete listing:

- 1) Are there any other persons such as small children or infants that we have not listed? YES ENTER EACH IN TABLE NO
- 2) In addition, are there any other people who may not be members of your family, such as domestic servants, lodgers or friends who usually live here? YES ENTER EACH IN TABLE NO

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	ELIGIBILITY					IF AGE 5-54 YEARS
				Does (NAME) usually live here?	Did (NAME) stay here last night?		CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF WOMAN SELECTED FOR DOMESTIC VIOLENCE MODULE	CIRCLE LINE NUMBER OF ALL MEN AGE 15-54	CIRCLE LINE NUMBER OF ALL CHILDREN UNDER AGE 6	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 5-14	
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household	What is the relationship of (NAME) to the head of the household?*	Is (NAME) male or female?			How old is (NAME)?						Has (NAME) been very sick for at least three months during the past 12 months? By very sick, I mean that (NAME) was too sick to work or do normal activities around the house for at least three of the past 12 months.

FOR Q.S 20 AND 22)
98 = DON'T KNOW

LINE NO.	PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 18 YEARS OLD**				EDUCATION						
	Is (NAME)'s natural mother alive?	IF ALIVE Does (NAME)'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER	Is (NAME)'s natural father alive?	IF ALIVE Does (NAME)'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER	IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS				
					Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended?*** What is the highest class (NAME) completed at that level?***	Is (NAME) currently attending school?	During the current school year, did (NAME) attend school at any time?	During the current school year, what level and class [is/was] (NAME) attending?***	During the previous school year, did (NAME) attend school at any time?	During that school year, what level and class did (NAME) attend?***
3)	Are there any guests or temporary visitors staying here, or anyone else who slept here last night, who have not been listed?						YES <input type="checkbox"/>	ENTER EACH IN TABLE			NO <input type="checkbox"/>

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																	
23	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO DWELLING 11 PIPED INTO YARD/PLOT 12 COMMUNITY STAND PIPE 13 WATER FROM OPEN WELL OPEN WELL IN YARD/PLOT ... 22 OPEN PUBLIC WELL 23 WATER FROM COVERED WELL OR BOREHOLE PROTECTED WELL IN YARD/PLOT 32 PROTECTED PUBLIC WELL ... 33 SURFACE WATER SPRING 41 RIVER/STREAM 42 POND/LAKE 43 DAM 44 RAINWATER 51 TANKER TRUCK/BOWSER 61 BOTTLED WATER 71 OTHER _____ 96 (SPECIFY)	→ 25 → 25 → 25 → 25 → 25 → 25 → 25																																	
24	How long does it take you to go there, get water, and come back?	MINUTES <input type="text"/> <input type="text"/> <input type="text"/> ON PREMISES 996																																		
25	What kind of toilet facilities does your household have?	FLUSH TOILET 11 PIT TOILET/LATRINE TRADITIONAL PIT TOILET 21 VENTILATED IMPROVED PIT (VIP) LATRINE 22 NO FACILITY/BUSH/FIELD 31 OTHER _____ 96 (SPECIFY)	→ 27																																	
26	Do you share these facilities with other households?	YES 1 NO 2																																		
27	Does your household have:	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>ELECTRICITY</td> <td>1</td> <td>2</td> </tr> <tr> <td>PARAFFIN LAMP</td> <td>1</td> <td>2</td> </tr> <tr> <td>RADIO</td> <td>1</td> <td>2</td> </tr> <tr> <td>TELEVISION</td> <td>1</td> <td>2</td> </tr> <tr> <td>CELL PHONE</td> <td>1</td> <td>2</td> </tr> <tr> <td>TELEPHONE (LANDLINE) ...</td> <td>1</td> <td>2</td> </tr> <tr> <td>BED WITH MATTRESS</td> <td>1</td> <td>2</td> </tr> <tr> <td>SOFA SET</td> <td>1</td> <td>2</td> </tr> <tr> <td>TABLE AND CHAIR(S)</td> <td>1</td> <td>2</td> </tr> <tr> <td>REFRIGERATOR</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	ELECTRICITY	1	2	PARAFFIN LAMP	1	2	RADIO	1	2	TELEVISION	1	2	CELL PHONE	1	2	TELEPHONE (LANDLINE) ...	1	2	BED WITH MATTRESS	1	2	SOFA SET	1	2	TABLE AND CHAIR(S)	1	2	REFRIGERATOR	1	2	
	YES	NO																																		
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TABLE AND CHAIR(S)	1	2																																		
REFRIGERATOR	1	2																																		
28	What type of fuel does your household mainly use for cooking?	ELECTRICITY 01 LPG/NATURAL GAS 02 BIOGAS 03 PARAFFIN/KEROSENE 04 COAL, LIGNITE 05 CHARCOAL 06 FIREWOOD, STRAW 07 DUNG 08 OTHER _____ 96 (SPECIFY)																																		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP												
29	MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND 11 DUNG 12 RUDIMENTARY FLOOR WOOD PLANKS 21 PALM/BAMBOO 22 BROKEN BRICKS 23 FINISHED FLOOR PARQUET OR POLISHED WOOD 31 VINYL OR ASPHALT STRIPS ... 32 CERAMIC TILES 33 CEMENT 34 CARPET 35 OTHER _____ 96 (SPECIFY)													
29A	How many rooms in your household are used for sleeping?	ROOMS <input type="text"/> <input type="text"/>													
29B	Does this household own any agricultural land?	YES 1 NO 2	→ 29D												
29C	How much agricultural land does this household own? _____ (SIZE AND UNIT)	ACRES <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> DON'T KNOW 9998													
29D	Does this household own any livestock?	YES 1 NO 2	→ 30												
29E	How many of the following types of animals are owned by this household? Goats? Pigs? Cattle? Sheep? Chickens?	NUMBER OF GOATS ... <input type="text"/> <input type="text"/> <input type="text"/> NUMBER OF PIGS <input type="text"/> <input type="text"/> <input type="text"/> NUMBER OF CATTLE ... <input type="text"/> <input type="text"/> <input type="text"/> NUMBER OF SHEEP ... <input type="text"/> <input type="text"/> <input type="text"/> NUMBER OF CHICKENS . <input type="text"/> <input type="text"/> <input type="text"/>													
30	Does any member of your household own: A bicycle? A motorcycle or motor scooter? A car or truck?	<table border="0"> <tr> <td></td> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO</td> </tr> <tr> <td>BICYCLE</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MOTORCYCLE/SCOOTER ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>CAR/TRUCK</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </table>		YES	NO	BICYCLE	1	2	MOTORCYCLE/SCOOTER ...	1	2	CAR/TRUCK	1	2	
	YES	NO													
BICYCLE	1	2													
MOTORCYCLE/SCOOTER ...	1	2													
CAR/TRUCK	1	2													
31	Does your household have any mosquito nets that can be used while sleeping?	YES 1 NO 2	→ 36												
32	How many mosquito nets does your household have? IF 7 OR MORE NETS, RECORD '7'.	NUMBER OF NETS <input type="text"/>													
33	ASK THE RESPONDENT TO SHOW YOU THE NET(S) IN THE HOUSEHOLD. IF MORE THAN 3 NETS, USE ADDITIONAL QUESTIONNAIRE(S).	<table border="1"> <thead> <tr> <th>NET #1</th> <th>NET #2</th> <th>NET #3</th> </tr> </thead> <tbody> <tr> <td>OBSERVED ... 1</td> <td>OBSERVED ... 1</td> <td>OBSERVED ... 1</td> </tr> <tr> <td>NOT OBSERVED 2 (SKIP TO 33C) ←</td> <td>NOT OBSERVED 2 (SKIP TO 33C) ←</td> <td>NOT OBSERVED 2 (SKIP TO 33C) ←</td> </tr> </tbody> </table>	NET #1	NET #2	NET #3	OBSERVED ... 1	OBSERVED ... 1	OBSERVED ... 1	NOT OBSERVED 2 (SKIP TO 33C) ←	NOT OBSERVED 2 (SKIP TO 33C) ←	NOT OBSERVED 2 (SKIP TO 33C) ←				
NET #1	NET #2	NET #3													
OBSERVED ... 1	OBSERVED ... 1	OBSERVED ... 1													
NOT OBSERVED 2 (SKIP TO 33C) ←	NOT OBSERVED 2 (SKIP TO 33C) ←	NOT OBSERVED 2 (SKIP TO 33C) ←													

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
33A	OBSERVE THE CONDITION OF THE MOSQUITO NET: DOES THE NET HAVE HOLES IN IT (HOLES THE SIZE OF THE TIP OF YOUR THUMB OR LARGER)?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
33B	OBSERVE (OR ASK) THE COLOR OF THE MOSQUITO NET.	BLUE 1 GREEN ... 2 WHITE 3 OTHER ... 4	BLUE 1 GREEN ... 2 WHITE 3 OTHER ... 4	BLUE 1 GREEN ... 2 WHITE 3 OTHER ... 4
33C	OBSERVE (OR ASK) THE SHAPE OF THE MOSQUITO NET.	CONICAL ... 1 RECTANGLE 2	CONICAL ... 1 RECTANGLE 2	CONICAL ... 1 RECTANGLE 2
34	How long ago did your household obtain the mosquito net?	MOS AGO <input type="text"/> <input type="text"/> MORE THAN 3 YEARS AGO... 96	MOS AGO <input type="text"/> <input type="text"/> MORE THAN 3 YEARS AGO... 96	MOS AGO <input type="text"/> <input type="text"/> MORE THAN 3 YEARS AGO... 96
35	Where did you get this mosquito net?	HEALTH FACILITY . 1 COMMUNITY-DISTRIBUTED 2 PRIVATE SHOP 3 OTHER ... 4 <hr/> (SPECIFY)	HEALTH FACILITY . 1 COMMUNITY-DISTRIBUTED 2 PRIVATE SHOP 3 OTHER ... 4 <hr/> (SPECIFY)	HEALTH FACILITY . 1 COMMUNITY-DISTRIBUTED 2 PRIVATE SHOP 3 OTHER ... 4 <hr/> (SPECIFY)
35A	When you got the net, did it come with an insecticide treatment kit?	YES 1 NO 2 NOT SURE ... 8	YES 1 NO 2 NOT SURE ... 8	YES 1 NO 2 NOT SURE ... 8
35B	Since you got the mosquito net, was it ever soaked or dipped in an insecticide to kill or repel mosquitos?	YES 1 NO 2 (SKIP TO 35D) ← NOT SURE ... 8	YES 1 NO 2 (SKIP TO 35D) ← NOT SURE ... 8	YES 1 NO 2 (SKIP TO 35D) ← NOT SURE ... 8
35C	How long ago was the net last soaked or dipped? IF LESS THAN 1 MONTH, RECORD '00'.	MOS AGO <input type="text"/> <input type="text"/> MORE THAN 3 YEARS AGO... 96 NOT SURE ... 98	MOS AGO <input type="text"/> <input type="text"/> MORE THAN 3 YEARS AGO... 96 NOT SURE ... 98	MOS AGO <input type="text"/> <input type="text"/> MORE THAN 3 YEARS AGO... 96 NOT SURE ... 98
35D	Did anyone sleep under this mosquito net last night?	YES 1 NO 2 (SKIP TO 35F) ← NOT SURE ... 8	YES 1 NO 2 (SKIP TO 35F) ← NOT SURE ... 8	YES 1 NO 2 (SKIP TO 35F) ← NOT SURE ... 8

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
35E	<p>Who slept under this mosquito net last night?</p> <p>RECORD THE RESPECTIVE LINE NUMBER FROM THE HOUSEHOLD SCHEDULE.</p>	NAME _____ LINE NO. <input type="text"/> <input type="text"/>	NAME _____ LINE NO. <input type="text"/> <input type="text"/>	NAME _____ LINE NO. <input type="text"/> <input type="text"/>	
35F		GO BACK TO 33 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 36.	GO BACK TO 33 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 36.	GO BACK TO 33 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE NETS, GO TO 36.	
36	What color of mosquito net do you prefer?	BLUE 1 GREEN 2 WHITE 3 OTHER _____ 4 (SPECIFY) DK/NO PREFERENCE 8			
37	What shape of mosquito net do you prefer?	CONICAL 1 RECTANGULAR 2 DK/NO PREFERENCE 8			

CHILD LABOUR

Now I would like to ask you about any work children in this household may do.

LINE NO. COPY LINE NUMBER OF CHILDREN AGE 5-14 FROM COL. (1)	CHILD'S NAME COPY THE NAMES OF CHILDREN AGE 5-14 FROM COL. (2)	During the past week, did (NAME) do any kind of work for someone who is not a member of this household? IF YES: For pay?	Since last (DAY OF THE WEEK), about how many hours did he/she do this work for someone who is not a member of the household?*	During the past week, did (NAME) help with house-keeping chores such as cooking, shopping, cleaning, washing clothes, fetching water, or caring for children?	Since last (DAY OF THE WEEK), about how many hours did he/she spend doing these chores?	During the past week, did (NAME) do any other family work on the farm or in a business?	Since last (DAY OF THE WEEK), about how many hours did he/she do this work?
(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)
<input type="text"/>		PAID UNPAID NO 1 2 3 GO TO 43 ←	<input type="text"/>	YES NO 1 2 GO TO 45 ←	<input type="text"/>	YES NO 1 2 GO TO NEXT LINE ←	<input type="text"/>
<input type="text"/>		1 2 3 GO TO 43 ←	<input type="text"/>	1 2 GO TO 45 ←	<input type="text"/>	1 2 GO TO NEXT LINE ←	<input type="text"/>
<input type="text"/>		1 2 3 GO TO 43 ←	<input type="text"/>	1 2 GO TO 45 ←	<input type="text"/>	1 2 GO TO NEXT LINE ←	<input type="text"/>
<input type="text"/>		1 2 3 GO TO 43 ←	<input type="text"/>	1 2 GO TO 45 ←	<input type="text"/>	1 2 GO TO NEXT LINE ←	<input type="text"/>
<input type="text"/>		1 2 3 GO TO 43 ←	<input type="text"/>	1 2 GO TO 45 ←	<input type="text"/>	1 2 GO TO NEXT LINE ←	<input type="text"/>
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<input type="text"/>		1 2 3 GO TO 43 ←	<input type="text"/>	1 2 GO TO 45 ←	<input type="text"/>	1 2 GO TO NEXT LINE ←	<input type="text"/>
<input type="text"/>		1 2 3 GO TO 43 ←	<input type="text"/>	1 2 GO TO 45 ←	<input type="text"/>	1 2 GO TO NEXT LINE ←	<input type="text"/>
<input type="text"/>		1 2 3 GO TO 43 ←	<input type="text"/>	1 2 GO TO 45 ←	<input type="text"/>	1 2 GO TO NEXT LINE ←	<input type="text"/>
<input type="text"/>		1 2 3 GO TO 43 ←	<input type="text"/>	1 2 GO TO 45 ←	<input type="text"/>	1 2 GO TO NEXT LINE ←	<input type="text"/>
<input type="text"/>		1 2 3 GO TO 43 ←	<input type="text"/>	1 2 GO TO 45 ←	<input type="text"/>	1 2 GO TO NEXT LINE ←	<input type="text"/>

* IF MORE THAN ONE JOB, INCLUDE ALL HOURS AT ALL JOBS.

TABLE FOR SELECTION OF WOMEN FOR THE DOMESTIC VIOLENCE QUESTIONS

LOOK AT THE LAST DIGIT OF THE QUESTIONNAIRE NUMBER ON THE COVER PAGE. THIS IS THE NUMBER OF THE ROW YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE WOMEN ON THE COVER SHEET OF THE HOUSEHOLD QUESTIONNAIRE. THIS IS THE NUMBER OF THE COLUMN YOU SHOULD GO TO. FIND THE BOX WHERE THE ROW AND THE COLUMN MEET AND CIRCLE THE NUMBER THAT APPEARS IN THE BOX. THIS IS THE NUMBER OF THE WOMAN WHO WILL BE ASKED THE DOMESTIC VIOLENCE QUESTIONS. THEN, GO TO COLUMN 8A IN THE HOUSEHOLD SCHEDULE AND CIRCLE THE LINE NUMBER OF THE ELIGIBLE WOMAN.

FOR EXAMPLE, IF THE QUESTIONNAIRE NUMBER IS '36716', GO TO ROW '6'. IF THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD, GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE BOX ('2'). SUPPOSE THE LINE NUMBERS OF THE THREE WOMEN ARE '02', '03', AND '07', THEN THE ELIGIBLE WOMAN FOR DOMESTIC VIOLENCE QUESTIONS IS THE SECOND ONE, I.E., THE ONE ON LINE '03'.

LAST DIGIT OF THE QUESTIONNAIRE NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN IN THE HOUSEHOLD							
	1	2	3	4	5	6	7	8
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT

CHECK COLUMN (10): RECORD THE LINE NUMBER, NAME AND AGE OF ALL CHILDREN UNDER AGE 6.

CHILDREN UNDER AGE 6				WEIGHT AND HEIGHT MEASUREMENT OF CHILDREN BORN IN 1999 OR LATER			
LINE NO. FROM COL. (10)	NAME FROM COL. (2)	AGE FROM COL. (7)	What is (NAME'S) date of birth?*	WEIGHT (KILOGRAMS)	HEIGHT (CENTIMETERS)	MEASURED LYING DOWN OR STANDING UP	RESULT 1 MEASURED 2 NOT PRESENT 3 REFUSED 6 OTHER
(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)
			DAY MONTH YEAR			LYING STAND.	
<input type="text"/>		<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	0 <input type="text"/> <input type="text"/> . <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	1 2	<input type="text"/>
<input type="text"/>		<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	0 <input type="text"/> <input type="text"/> . <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	1 2	<input type="text"/>
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<input type="text"/>		<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	0 <input type="text"/> <input type="text"/> . <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	1 2	<input type="text"/>
<input type="text"/>		<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	0 <input type="text"/> <input type="text"/> . <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	1 2	<input type="text"/>
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TICK HERE IF CONTINUATION SHEET USED				<input type="text"/>			

* FOR CHILDREN NOT INCLUDED IN ANY BIRTH HISTORY, ASK DAY, MONTH AND YEAR. FOR ALL OTHER CHILDREN, COPY MONTH AND YEAR FROM 215 IN MOTHER'S BIRTH HISTORY AND ASK DAY.

HEMOGLOBIN MEASUREMENT OF CHILDREN BORN IN 1999 OR LATER

	LINE NO. OF PARENT/ RESPONSIBLE ADULT. RECORD '00' IF NOT LISTED IN HOUSEHOLD SCHEDULE	READ CONSENT STATEMENT TO WOMAN/PARENT/RESPONSIBLE ADULT* CIRCLE CODE (AND SIGN)	HEMOGLOBIN LEVEL (G/DL)		RESULT 1 MEASURED 2 REFUSED 3 NOT PRESENT 6 OTHER
(55)	(56)	(57)	(58)	(59)	(60)
	<input type="text"/>	GRANTED REFUSED 1 SIGN _____ NEXT LINE ← 2	<input type="text"/> . <input type="text"/>		<input type="text"/>
	<input type="text"/>	1 SIGN _____ NEXT LINE ← 2	<input type="text"/> . <input type="text"/>		<input type="text"/>
	<input type="text"/>	1 SIGN _____ NEXT LINE ← 2	<input type="text"/> . <input type="text"/>		<input type="text"/>
	<input type="text"/>	1 SIGN _____ NEXT LINE ← 2	<input type="text"/> . <input type="text"/>		<input type="text"/>
	<input type="text"/>	1 SIGN _____ NEXT LINE ← 2	<input type="text"/> . <input type="text"/>		<input type="text"/>
	<input type="text"/>	1 SIGN _____ NEXT LINE ← 2	<input type="text"/> . <input type="text"/>		<input type="text"/>

* CONSENT STATEMENT

As part of this survey, we are studying anemia among women and children. Anemia is a serious health problem. You do not have to participate; however, if you do, it will help the government to develop programs to prevent and treat anemia.

We request that you agree to let me test (NAME OF CHILDREN BORN IN 1999 OR LATER) for anemia. For the test, I will take a few drops of blood from a finger or from the heel of the child. The test uses disposable sterile instruments that are clean and completely safe. The blood will be analyzed with new equipment and the results of the test will be given to you right after the blood is taken. The results will be kept confidential.

Do you have any questions? Do you agree to have the test done?

61	<p>CHECK 58 AND 59:</p> <p>NUMBER OF CHILDREN WITH HEMOGLOBIN LEVEL BELOW THE CUTOFF POINT*</p> <div style="display: flex; justify-content: space-around; align-items: center; margin: 10px 0;"> <div style="text-align: center;"> <p>ONE OR MORE <input style="width: 30px; height: 15px;" type="checkbox"/></p> <p>↓</p> </div> <div style="text-align: center;"> <p>NONE <input style="width: 30px; height: 15px;" type="checkbox"/></p> <p>↓</p> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%; padding: 5px;"> <p>GIVE EACH PARENT/RESPONSIBLE ADULT RESULT OF HEMOGLOBIN MEASUREMENT AND CONTINUE WITH 62.**</p> </div> <div style="width: 45%; padding: 5px;"> <p>GIVE EACH PARENT/RESPONSIBLE ADULT RESULT OF HEMOGLOBIN MEASUREMENT AND END HOUSEHOLD INTERVIEW.</p> </div> </div>
----	---

62	<p>We detected a low level of hemoglobin in the blood of (NAME OF CHILD(REN)). This indicates that (NAME OF CHILD(REN)) have developed severe anemia, which is a serious health problem. We would like to inform the doctor at _____ about the condition of (NAME OF CHILD(REN)). This will assist you in obtaining appropriate treatment for the condition. Do you agree that the information about the level of hemoglobin in the blood of (NAME OF CHILD(REN)) may be given to the doctor?</p>
----	---

NAME OF CHILD WITH HEMOGLOBIN BELOW THE CUTOFF POINT	NAME OF PARENT/RESPONSIBLE ADULT	AGREES TO REFERRAL?
		YES 1 NO 2
		YES 1 NO 2
		YES 1 NO 2
		YES 1 NO 2
		YES 1 NO 2
		YES 1 NO 2
		YES 1 NO 2
		YES 1 NO 2
		YES 1 NO 2

* The cutoff point is 7 g/dl for children.

** If more than one child is below the cutoff point, read the statement in Q.62 to each woman who is below the cutoff point and to each parent/responsible adult of a child who is below the cutoff point.

MALAWI DEMOGRAPHIC AND HEALTH SURVEY
 MALAWI GOVERNMENT - NATIONAL STATISTICAL OFFICE
 WOMAN'S QUESTIONNAIRE

IDENTIFICATION															
PLACE NAME _____	<table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>														
NAME OF HOUSEHOLD HEAD _____															
DISTRICT _____															
CLUSTER NUMBER															
HOUSEHOLD NUMBER															
URBAN/RURAL (URBAN=1, RURAL=2)															
LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE (LARGE CITY=1, SMALL CITY=2, TOWN=3, COUNTRYSIDE=4)															
NAME AND LINE NUMBER OF WOMAN _____															

INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY _____
INTERVIEWER'S NAME	_____	_____	_____	MONTH _____
RESULT*	_____	_____	_____	YEAR _____
NEXT VISIT: DATE	_____	_____		INT. CODE _____
TIME	_____	_____		RESULT _____
				TOTAL NUMBER OF VISITS _____
*RESULT CODES: 1 COMPLETED 4 REFUSED 2 NOT AT HOME 5 PARTLY COMPLETED 7 OTHER _____ 3 POSTPONED 6 INCAPACITATED (SPECIFY)				

LANGUAGE OF QUESTIONNAIRE***: <input type="text" value="3"/>	NATIVE LANGUAGE OF RESPONDENT***: <input type="text"/>
LANGUAGE OF INTERVIEW***: <input type="text"/>	WAS A TRANSLATOR USED? (YES=1, NO=2) <input type="text"/>
*** LANGUAGE CODES: 1 CHICHEWA 2 TUMBUKA 3 ENGLISH 4 OTHER _____(SPECIFY)	

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____	_____	_____
DATE _____ <input type="text"/>	DATE _____ <input type="text"/>	<input type="text"/>	<input type="text"/>

SECTION 1. RESPONDENT'S BACKGROUND

INFORMED CONSENT: INTRODUCTORY

Hello. My name is _____ and I am working with the National Statistical Office. The National Statistical Office, together with the Ministry of Health, is conducting a national survey about the health of women and children. Your household is one of the households that have been randomly selected out of all households in Malawi to be asked the questions in this survey. We would very much appreciate your participation in this survey. I would like to ask you about your health (and the health of your children). This information will help the government to plan health services. The survey usually takes about 45 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
May I begin the interview now?

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE INTERVIEWED 1 RESPONDENT DOES NOT AGREE TO BE INTERVIEWED ... 2 → END
↓

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR <input type="text"/> <input type="text"/> MINUTES <input type="text"/> <input type="text"/>	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a city, in a town, or in the countryside?	CITY 1 TOWN 2 COUNTRYSIDE 3	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS <input type="text"/> <input type="text"/> ALWAYS 95 VISITOR 96	→ 105
104	Just before you moved here, did you live in a city, in a town, or in the countryside?	CITY 1 TOWN 2 COUNTRYSIDE 3	
105	In what month and year were you born?	MONTH <input type="text"/> <input type="text"/> DON'T KNOW MONTH 98 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
107	Have you ever attended school?	YES 1 NO 2	→ 111
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY 1 SECONDARY 2 HIGHER 3	
109	What is the highest (class/form/year) you completed at that level?	CLASS <input type="text"/> <input type="text"/>	

SENTENCES FOR LITERACY TEST (Q 111)

CHICHEWA

**Makolo amakonda ana awo.
Ulimi ndi khama.
Mwana akuwerenga bukhu.
Ana amalimbikila kusukulu.**

TUMBUKA

**Bapapi wakutemwa wana wawo.
Kulima ndi ntchito yinonono.
Mwana wakuwerenga bukhu.
Wana wakulimbikira kusukulu.**

YAO

**Anangolo akusyanonyela wanachewawo.
Kulima kukusoseka kulimbichila.
Mwanache akuwalanga buku.
Wanache akusyalimbichila sukulu.**

ENGLISH

**Parents love their children.
Farming is hard work.
The child is reading a book.
Children work hard at school.**

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES 1 NO 2	→ 206								
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES 1 NO 2	→ 204								
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS AT HOME <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES 1 NO 2	→ 206								
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS ELSEWHERE <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES 1 NO 2	→ 208								
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> GIRLS DEAD <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL <table border="1"><tr><td> </td><td> </td></tr></table>									
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES <input type="checkbox"/> NO <input type="checkbox"/> → PROBE AND CORRECT 201-208 AS NECESSARY.										
210	CHECK 208: ONE OR MORE BIRTHS <input type="checkbox"/> NO BIRTHS <input type="checkbox"/> → 226										

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
 RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.

212	213	214	215	216	217	218	219	220	221
What name was given to your (first/next) baby? (NAME)	Were any of these births twins?	Is (NAME) a boy or a girl?	In what month and year was (NAME) born? PROBE: What is his/her birthday?	Is (NAME) still alive?	How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD).	How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
01	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (NEXT BIRTH)	DAYS . . . 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS . . 3 <input type="text"/> <input type="text"/>	
02	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS . . . 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS . . 3 <input type="text"/> <input type="text"/>	YES 1 NO 2
03	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS . . . 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS . . 3 <input type="text"/> <input type="text"/>	YES 1 NO 2
04	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS . . . 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS . . 3 <input type="text"/> <input type="text"/>	YES 1 NO 2
05	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS . . . 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS . . 3 <input type="text"/> <input type="text"/>	YES 1 NO 2
06	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS . . . 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS . . 3 <input type="text"/> <input type="text"/>	YES 1 NO 2
07	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS . . . 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS . . 3 <input type="text"/> <input type="text"/>	YES 1 NO 2

212	213	214	215	216	217 IF ALIVE:	218 IF ALIVE:	219 IF ALIVE:	220 IF DEAD:	221	
What name was given to your next baby? (NAME)	Were any of these births twins?	Is (NAME) a boy or a girl?	In what month and year was (NAME) born? PROBE: What is his/her birthday?	Is (NAME) still alive?	How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD).	How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?	
08	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> YEAR <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> ↓ (GO TO 221)	DAYS . . 1 MONTHS 2 YEARS . . 3	YES 1 NO 2	
09	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> YEAR <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> ↓ (GO TO 221)	DAYS . . 1 MONTHS 2 YEARS . . 3	YES 1 NO 2	
10	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> YEAR <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> ↓ (GO TO 221)	DAYS . . 1 MONTHS 2 YEARS . . 3	YES 1 NO 2	
11	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> YEAR <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> ↓ (GO TO 221)	DAYS . . 1 MONTHS 2 YEARS . . 3	YES 1 NO 2	
12	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> YEAR <input type="text"/>	YES . . 1 NO . . . 2 ↓ 220	AGE IN YEARS <input type="text"/>	YES . . . 1 NO 2	LINE NUMBER <input type="text"/> ↓ (GO TO 221)	DAYS . . 1 MONTHS 2 YEARS . . 3	YES 1 NO 2	
222	Have you had any live births since the birth of (NAME OF LAST BIRTH)?					YES 1 NO 2				
223	<p>COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:</p> <p>NUMBERS ARE SAME <input type="checkbox"/> NUMBERS ARE DIFFERENT <input type="checkbox"/> (PROBE AND RECONCILE)</p> <p>CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED.</p> <p>FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED.</p> <p>FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED.</p> <p>FOR AGE AT DEATH 12 MONTHS OR 1 YEAR: PROBE TO DETERMINE EXACT NUMBER OF MONTHS.</p>									
224	CHECK 215 AND ENTER THE NUMBER OF BIRTHS IN 1999 OR LATER. IF NONE, RECORD '0'.									

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	FOR EACH BIRTH SINCE JANUARY 1999, ENTER 'B' IN THE MONTH OF BIRTH IN COLUMN 1 OF THE CALENDAR. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.) WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE.		
226	Are you pregnant now?	YES 1 NO 2 UNSURE 8	<input type="checkbox"/> → 229
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. ENTER 'P's IN COLUMN 1 OF CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS <input type="text"/> <input type="text"/>	
228	At the time you became pregnant did you want to become pregnant <u>then</u> , did you want to wait until <u>later</u> , or did you <u>not want</u> to have any (more) children at all?	THEN 1 LATER 2 NOT AT ALL 3	
229	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES 1 NO 2	→ 237
230	When did the last such pregnancy end?	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
231	CHECK 230: LAST PREGNANCY ENDED IN <input type="checkbox"/> LAST PREGNANCY ENDED BEFORE <input type="checkbox"/> JAN. 1999 OR LATER JAN. 1999		→ 237
232	How many months pregnant were you when the last such pregnancy ended? RECORD NUMBER OF COMPLETED MONTHS. ENTER 'T' IN COLUMN 1 OF CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.	MONTHS <input type="text"/> <input type="text"/>	
233	Have you ever had any other pregnancies that did not result in a live birth?	YES 1 NO 2	→ 237
234	ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JANUARY 1999. ENTER 'T' IN COLUMN 1 OF CALENDAR IN THE MONTH THAT EACH PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.		
235	Did you have any pregnancies that terminated before 1999 that did not result in a live birth?	YES 1 NO 2	→ 237
236	When did the last such pregnancy that terminated before 1999 end?	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
237	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO 1 <table border="1"><tr><td></td><td></td></tr></table> WEEKS AGO 2 <table border="1"><tr><td></td><td></td></tr></table> MONTHS AGO 3 <table border="1"><tr><td></td><td></td></tr></table> YEARS AGO 4 <table border="1"><tr><td></td><td></td></tr></table> IN MENOPAUSE/ HAS HAD HYSTERECTOMY ... 994 BEFORE LAST BIRTH 995 NEVER MENSTRUATED 996									
238	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations?	YES 1 NO 2 DON'T KNOW 8	→ 301								
239	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS 1 DURING HER PERIOD 2 RIGHT AFTER HER PERIOD HAS ENDED 3 HALFWAY BETWEEN TWO PERIODS 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8									

SECTION 3. CONTRACEPTION

Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302.

301	Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?	302 Have you ever used (METHOD)?
01	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	YES 1 NO 2 ↘
02	MALE STERILIZATION Men can have an operation to avoid having any more children.	YES 1 NO 2 ↘
03	PILL Women can take a pill every day to avoid becoming pregnant.	YES 1 NO 2 ↘
04	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	YES 1 NO 2 ↘
05	INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES 1 NO 2 ↘
06	IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES 1 NO 2 ↘
07	CONDOM Men can put a rubber sheath on their penis before sexual intercourse.	YES 1 NO 2 ↘
08	FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse.	YES 1 NO 2 ↘
12	RHYTHM OR PERIODIC ABSTINENCE Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES 1 NO 2 ↘
13	WITHDRAWAL Men can be careful and pull out before climax.	YES 1 NO 2 ↘
14	EMERGENCY CONTRACEPTION Women can take pills up to 72 hours after sexual intercourse to avoid becoming pregnant.	YES 1 NO 2 ↘
15	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES 1 _____ (SPECIFY) _____ (SPECIFY) NO 2
303	CHECK 302: NOT A SINGLE "YES" (NEVER USED) <input type="checkbox"/> AT LEAST ONE "YES" (EVER USED) <input type="checkbox"/> → 307	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES 1 NO 2	→ 306
305	ENTER '0' IN COLUMN 1 OF CALENDAR IN EACH BLANK MONTH.		→ 329
306	What have you used or done? CORRECT 302 AND 303 (AND 301 IF NECESSARY).		
307	Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. How many living children did you have at that time, if any? IF NONE, RECORD '00'.	NUMBER OF CHILDREN <input type="text"/> <input type="text"/>	
308	CHECK 302 (01): WOMAN NOT STERILIZED <input type="checkbox"/> WOMAN STERILIZED <input type="checkbox"/>		→ 311A
309	CHECK 226: NOT PREGNANT OR UNSURE <input type="checkbox"/> PREGNANT <input type="checkbox"/>		→ 318
310	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES 1 NO 2	→ 318
311	Which method are you using? IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD ON LIST.	FEMALE STERILIZATION A MALE STERILIZATION B PILL C IUD D INJECTABLES E IMPLANTS F CONDOM G FEMALE CONDOM H PERIODIC ABSTINENCE L WITHDRAWAL M OTHER _____ X (SPECIFY)	→ 313 → 316A
311A	CIRCLE 'A' FOR FEMALE STERILIZATION.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP						
313	<p>In what facility did the sterilization take place?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p> <p>IF BOTH CODE 'A' AND CODE 'B' ARE CIRCLED IN 311, ASK 313-317 ABOUT FEMALE STERILIZATION ONLY.</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL 11</p> <p>GOVT. HEALTH CENTER 12</p> <p>FAMILY PLANNING CLINIC 13</p> <p>OTHER PUBLIC _____ 16</p> <p>(SPECIFY)</p> <p>MISSION</p> <p>HOSPITAL 21</p> <p>HEALTH CENTER 22</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC ... 31</p> <p>PRIVATE DOCTOR'S OFFICE ... 32</p> <p>OTHER PRIVATE</p> <p>MEDICAL _____ 36</p> <p>(SPECIFY)</p> <p>BLM 41</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p> <p>DON'T KNOW 98</p>							
314	<p>CHECK 311:</p> <p>CODE 'A' CIRCLED <input type="checkbox"/> CODE 'A' NOT CIRCLED <input type="checkbox"/></p> <p>Before your sterilization operation, were you told that you would not be able to have any (more) children because of the operation? Before the sterilization operation, was your husband/partner told that he would not be able to have any (more) children because of the operation?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>							
316	<p>In what month and year was the sterilization performed?</p>	<p>MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table></p> <p>YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table></p>							
316A	<p>In what month and year did you start using (CURRENT METHOD) continuously?</p> <p>PROBE: For how long have you been using (CURRENT METHOD) now without stopping?</p>								
316B	<p>CHECK 316/316A, 215 AND 230:</p> <p>ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 316/316A</p> <p>GO BACK TO 316/316A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>							
317	<p>CHECK 316/316A:</p> <p>YEAR IS 1999 OR LATER <input type="checkbox"/></p> <p>ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING.</p> <p>ENTER METHOD SOURCE CODE IN COLUMN 2 OF CALENDAR IN MONTH STARTED USING.</p> <p>THEN CONTINUE WITH 318</p>	<p>YEAR IS 1998 OR EARLIER <input type="checkbox"/></p> <p>ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND EACH MONTH BACK TO JANUARY 1999.</p> <p>THEN SKIP TO _____ 327</p>							

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
318	<p>I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years.</p> <p>USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 1999. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.</p> <p>IN COLUMN 1, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH.</p> <p>ILLUSTRATIVE QUESTIONS: COLUMN 1: * When was the last time you used a method? Which method was that? * When did you start using that method? How long after the birth of (NAME)? * How long did you use the method then?</p> <p>IN COLUMN 2, ENTER METHOD SOURCE CODE IN FIRST MONTH OF EACH USE.</p> <p>ILLUSTRATIVE QUESTIONS: COLUMN 2: * Where did you obtain the method when you started using it? * Where did you get advice on how to use the method [for LAM, rhythm, or withdrawal]</p> <p>IN COLUMN 3, ENTER CODES FOR DISCONTINUATION NEXT TO LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 3 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1.</p> <p>ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT.</p> <p>ILLUSTRATIVE QUESTIONS: COLUMN 3: * Why did you stop using the (METHOD)? * Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason?</p> <p>IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK:</p> <p style="padding-left: 40px;">* How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER '0' IN EACH SUCH MONTH IN COLUMN 1.</p>		
321	<p>CHECK 311/311A:</p> <p>CIRCLE METHOD CODE:</p> <p>IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.</p>	<p>NO CODE CIRCLED 00</p> <p>FEMALE STERILIZATION 01</p> <p>MALE STERILIZATION 02</p> <p>PILL 03</p> <p>IUD 04</p> <p>INJECTABLES 05</p> <p>IMPLANTS 06</p> <p>CONDOM 07</p> <p>FEMALE CONDOM 08</p> <p>PERIODIC ABSTINENCE 12</p> <p>WITHDRAWAL 13</p> <p>OTHER METHOD 96</p>	<p>→ 329</p> <p>→ 331</p> <p>→ 328</p> <p>→ 325</p> <p>→ 331</p> <p>→ 331</p> <p>→ 331</p>
322	<p>You obtained (CURRENT METHOD) from (SOURCE OF METHOD FROM CALENDAR) in (DATE). At that time, were you told about side effects or problems you might have with the method?</p>	<p>YES 1</p> <p>NO 2</p>	<p>→ 324</p>
323	<p>Were you ever told by a health or family planning worker about side effects or problems you might have with the method?</p>	<p>YES 1</p> <p>NO 2</p>	<p>→ 324A</p>
324	<p>Were you told what to do if you experienced side effects or problems?</p>	<p>YES 1</p> <p>NO 2</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
324A	Were you ever advised that this contraceptive method does not protect against AIDS or other sexually-transmitted diseases?	YES 1 NO 2	
325	<p>CHECK 322:</p> <p>CODE '1' CIRCLED <input type="checkbox"/></p> <p>CODE '1' NOT CIRCLED <input type="checkbox"/></p> <p>When you obtained (CURRENT METHOD) from (SOURCE OF METHOD FROM CALENDAR) in (DATE), were you told about other methods of family planning that you could use?</p> <p>At that time, were you told about other methods of family planning that you could use?</p>	YES 1 NO 2	→ 327
326	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES 1 NO 2	
327	<p>CHECK 311/311A:</p> <p>CIRCLE METHOD CODE:</p>	FEMALE STERILIZATION 01 MALE STERILIZATION 02 PILL 03 IUD 04 INJECTABLES 05 IMPLANTS 06 CONDOM 07 FEMALE CONDOM 08 PERIODIC ABSTINENCE 12 WITHDRAWAL 13 OTHER METHOD 96	→ 331 → 331 → 331 → 331 → 331
328	<p>Where did you obtain (CURRENT METHOD) the last time?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	PUBLIC SECTOR GOVT. HOSPITAL 11 GOVT. HEALTH CENTER 12 FAMILY PLANNING CLINIC 13 MOBILE CLINIC 14 CBDA/FIELDWORKER 15 OTHER PUBLIC _____ 16 (SPECIFY) MISSION HOSPITAL 21 HEALTH CENTER 22 MOBILE CLINIC 23 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ... 31 PHARMACY 32 PRIVATE DOCTOR 33 MOBILE CLINIC 34 CBDA/FIELDWORKER 35 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY) BLM 41 OTHER SOURCE SHOP 51 FRIEND/RELATIVE 53 OTHER _____ 96 (SPECIFY)	→ 331

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
329	Do you know of a place where you can obtain a method of family planning?	YES 1 NO 2	→ 331
330	<p>Where is that?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p> <p>Any other place?</p> <p>RECORD ALL PLACES MENTIONED.</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL A</p> <p>GOVT. HEALTH CENTER B</p> <p>FAMILY PLANNING CLINIC C</p> <p>MOBILE CLINIC D</p> <p>CBDA/FIELDWORKER E</p> <p>OTHER PUBLIC _____ F</p> <p>(SPECIFY)</p> <p>MISSION</p> <p>HOSPITAL G</p> <p>HEALTH CENTER H</p> <p>MOBILE CLINIC I</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC ... J</p> <p>PHARMACY K</p> <p>PRIVATE DOCTOR L</p> <p>MOBILE CLINIC M</p> <p>CBDA/FIELDWORKER N</p> <p>OTHER PRIVATE MEDICAL _____ O</p> <p>(SPECIFY)</p> <p>BLM P</p> <p>OTHER SOURCE</p> <p>SHOP Q</p> <p>CHURCH R</p> <p>FRIEND/RELATIVE S</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	
331	In the last 12 months, were you visited by a fieldworker who talked to you about family planning?	YES 1 NO 2	
332	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES 1 NO 2	→ 401
333	Did any staff member at the health facility speak to you about family planning methods?	YES 1 NO 2	

SECTION 4A. PREGNANCY, POSTNATAL CARE AND BREASTFEEDING

401	CHECK 224:	<p>ONE OR MORE BIRTHS IN 1999 OR LATER <input type="checkbox"/></p> <p>NO BIRTHS IN 1999 OR LATER <input type="checkbox"/></p>	→ 487	
402	<p>ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 1999 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).</p> <p>Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately.)</p>			
403	LINE NUMBER FROM 212	<p>LAST BIRTH</p> <p>LINE NUMBER ... <input type="text"/></p>	<p>NEXT-TO-LAST BIRTH</p> <p>LINE NUMBER ... <input type="text"/></p>	<p>SECOND-FROM-LAST BIRTH</p> <p>LINE NUMBER ... <input type="text"/></p>
404	FROM 212 AND 216	<p>NAME _____</p> <p>LIVING <input type="checkbox"/> DEAD <input type="checkbox"/></p>	<p>NAME _____</p> <p>LIVING <input type="checkbox"/> DEAD <input type="checkbox"/></p>	<p>NAME _____</p> <p>LIVING <input type="checkbox"/> DEAD <input type="checkbox"/></p>
405	<p>At the time you became pregnant with (NAME), did you want to become pregnant <u>then</u>, did you want to wait until <u>later</u>, or did you <u>not want</u> to have any (more) children at all?</p>	<p>THEN 1 (SKIP TO 407)←</p> <p>LATER 2</p> <p>NOT AT ALL 3 (SKIP TO 407)←</p>	<p>THEN 1 (SKIP TO 423)←</p> <p>LATER 2</p> <p>NOT AT ALL 3 (SKIP TO 423)←</p>	<p>THEN 1 (SKIP TO 423)←</p> <p>LATER 2</p> <p>NOT AT ALL 3 (SKIP TO 423)←</p>
406	<p>How much longer would you like to have waited?</p>	<p>MONTHS . 1 <input type="text"/></p> <p>YEARS . 2 <input type="text"/></p> <p>DON'T KNOW ... 998</p>	<p>MONTHS . 1 <input type="text"/></p> <p>YEARS . 2 <input type="text"/></p> <p>DON'T KNOW ... 998</p>	<p>MONTHS . 1 <input type="text"/></p> <p>YEARS . 2 <input type="text"/></p> <p>DON'T KNOW ... 998</p>
407	<p>Did you see anyone for antenatal care for this pregnancy?</p> <p>IF YES: Whom did you see? Anyone else?</p> <p>PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN.</p>	<p>HEALTH PROFESSIONAL DOCTOR/CLINICAL OFFICER A</p> <p>NURSE/MIDWIFE B</p> <p>PATIENT ATTNDT C</p> <p>OTHER PERSON TRADITIONAL BIRTH ATTENDANT ... D</p> <p>OTHER _____ X (SPECIFY)</p> <p>NO ONE Y (SKIP TO 415)←</p>		

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
407A	Where did you receive antenatal care for this pregnancy? Anywhere else?	HOME YOUR HOME ... A OTHER HOME ... B PUBLIC SECTOR GOVT. HOSPITAL C GOVT. HEALTH CENTER D GOVT. HEALTH POST E MOBILE CLINIC .. F OTHER PUBLIC _____ G (SPECIFY) MISSION HOSPITAL H HEALTH CENTER I PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC J MOBILE CLINIC .. K OTHER PRIVATE MED. _____ L (SPECIFY) TRAD. BIRTH ATTENDANT M OTHER _____ X (SPECIFY)		
408	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW 98		
409	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES . . <input type="text"/> <input type="text"/> DON'T KNOW 98		
410	CHECK 409: NUMBER OF TIMES RECEIVED ANTENATAL CARE	ONCE <input type="checkbox"/> MORE THAN ONCE OR DK <input type="checkbox"/> (SKIP TO 412) <input type="checkbox"/> 		
411	How many months pregnant were you the last time you received antenatal care?	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW 98		

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
412	During this pregnancy, were any of the following done at least once? Were you weighed? Was your height measured? Was your blood pressure measured? Did you give a urine sample? Did you give a blood sample? Was the fetal heartbeat checked? Did someone examine your eyes?	YES NO WEIGHT ... 1 2 HEIGHT ... 1 2 BP 1 2 URINE 1 2 BLOOD ... 1 2 HEART ... 1 2 EYES 1 2		
412A	During any of the antenatal visits for the pregnancy, were you given any information or counseled about AIDS or the AIDS virus?	YES 1 NO 2 DON'T KNOW 8		
412B	Were you tested for the AIDS virus as part of your antenatal care?	YES 1 NO 2 (SKIP TO 413) ← DON'T KNOW 8		
412C	I don't want to know the results, but did you get the results of the test?	YES 1 NO 2		
413	Were you told about the signs of pregnancy complications?	YES 1 NO 2 (SKIP TO 414A) ← DON'T KNOW 8		
414	Were you told where to go if you had these complications?	YES 1 NO 2 DON'T KNOW 8		
414A	During this pregnancy, did you experience: High blood pressure? Swelling of your feet? Anemia? Bleeding?	YES NO 1 2 1 2 1 2 1 2		
414B	CHECK 414A: COMPLICATIONS IN PREGNANCY	IF ANY ALL YES NO RESPONSE RES- <input type="checkbox"/> PONSE (SKIP ↓ <input type="checkbox"/> TO 415) ↘		
414C	Did you seek advice or treatment for these problems?	YES 1 NO 2 (SKIP TO 415) ←		

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
414D	<p>Where did you seek advice or treatment?</p> <p>IF SOURCE IS A HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p> <p>Anywhere else?</p> <p>RECORD ALL PLACES MENTIONED.</p>	<p>HOME</p> <p>YOUR HOME ... A</p> <p>OTHER HOME ... B</p> <p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL C</p> <p>GOVT. HEALTH CENTER D</p> <p>GOVT. HEALTH POST E</p> <p>MOBILE CLINIC .. F</p> <p>OTHER PUBLIC _____ G</p> <p>(SPECIFY)</p> <p>MISSION</p> <p>HOSPITAL H</p> <p>HEALTH CENTER I</p> <p>PRIVATE MED. SECTOR</p> <p>PVT. HOSPITAL/CLINIC J</p> <p>MOBILE CLINIC .. K</p> <p>OTHER PRIVATE MED. _____ L</p> <p>(SPECIFY)</p> <p>TRAD. BIRTH ATTENDANT M</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>		
415	<p>During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?</p>	<p>YES 1</p> <p>NO 2</p> <p>(SKIP TO 416A) ← </p> <p>DON'T KNOW 8</p>		
416	<p>During this pregnancy, how many times did you get this injection?</p>	<p>TIMES <input type="checkbox"/></p> <p>DON'T KNOW 8</p>		
416A	<p>Before this pregnancy, were you given an injection in the arm to prevent you from getting tetanus?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>		
417	<p>During this pregnancy, were you given or did you buy any iron tablets?</p> <p>SHOW TABLETS.</p>	<p>YES 1</p> <p>NO 2</p> <p>(SKIP TO 419) ← </p> <p>DON'T KNOW 8</p>		

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
418	During the whole pregnancy, for how many days did you take the tablets? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	NUMBER OF DAYS <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW ... 998		
419	During this pregnancy, did you have difficulty with your vision during the daylight?	YES 1 NO 2 DON'T KNOW 8		
420	During this pregnancy, did you have difficulty with your vision at night?	YES 1 NO 2 DON'T KNOW 8		
421	During this pregnancy, did you take any drugs to prevent you from getting malaria? Not considered here are instances where you took the drug because you had malaria.	YES 1 NO 2 (SKIP TO 423) ← DON'T KNOW 8		
422	What drugs did you take? RECORD ALL MENTIONED. IF TYPE OF DRUG IS NOT DETERMINED, SHOW TYPICAL ANTIMALARIAL DRUGS TO RESPONDENT.	SP/FANSIDAR ... 1 DON'T KNOW 8 OTHER _____ 6 (SPECIFY)		
422A	CHECK 422: DRUGS TAKEN FOR MALARIA PREVENTION	CODE '1' CIRCLED <input type="checkbox"/> ↓ CODE '1' NOT CIRCLED <input type="checkbox"/> (SKIP TO 423) →		
422B	How many times did you take SP/Fansidar during this pregnancy?	TIMES <input type="text"/> <input type="text"/>		
422C	CHECK 407: ANTENATAL CARE RECEIVED DURING THIS PREGNANCY?	CODE 'A', 'B' OR 'C' CIRCLED <input type="checkbox"/> ↓ OTHER <input type="checkbox"/> (SKIP TO 423) →		
422D	Did you get the SP/Fansidar during an antenatal visit, during another visit to a health facility or from some other source?	ANTENATAL VISIT .. 1 ANOTHER FACILITY VISIT 2 OTHER SOURCE _____ 6 (SPECIFY) (SKIP TO 423) ←		
422E	Did you take the SP/Fansidar under direct observation by the health worker each time, or did you take it at home?	DIRECT OBSERVATION ... 1 AT HOME 2		

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
		NAME _____	NAME _____	NAME _____
423	When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small?	VERY LARGE 1 LARGER THAN AVERAGE 2 AVERAGE 3 SMALLER THAN AVERAGE 4 VERY SMALL 5 DON'T KNOW 8	VERY LARGE 1 LARGER THAN AVERAGE 2 AVERAGE 3 SMALLER THAN AVERAGE 4 VERY SMALL 5 DON'T KNOW 8	VERY LARGE 1 LARGER THAN AVERAGE 2 AVERAGE 3 SMALLER THAN AVERAGE 4 VERY SMALL 5 DON'T KNOW 8
425	How much did (NAME) weigh? RECORD WEIGHT FROM HEALTH CARD, IF AVAILABLE.	GRAMS FROM CARD 1 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> GRAMS FROM RECALL 2 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW 99998	GRAMS FROM CARD 1 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> GRAMS FROM RECALL 2 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW 99998	GRAMS FROM CARD 1 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> GRAMS FROM RECALL 2 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW 99998
426	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY	HEALTH PROFESSIONAL DOCTOR/CLINICAL OFFICER A NURSE/MIDWIFE B PATIENT ATTNDT C OTHER PERSON TRADITIONAL BIRTH ATTENDANT ... D RELATIVE/FRIEND E OTHER _____ X (SPECIFY) NO ONE Y	HEALTH PROFESSIONAL DOCTOR/CLINICAL OFFICER A NURSE/MIDWIFE B PATIENT ATTNDT C OTHER PERSON TRADITIONAL BIRTH ATTENDANT ... D RELATIVE/FRIEND E OTHER _____ X (SPECIFY) NO ONE Y	HEALTH PROFESSIONAL DOCTOR/CLINICAL OFFICER A NURSE/MIDWIFE B PATIENT ATTNDT C OTHER PERSON TRADITIONAL BIRTH ATTENDANT ... D RELATIVE/FRIEND E OTHER _____ X (SPECIFY) NO ONE Y
427	Where did you give birth to (NAME)? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	HOME YOUR HOME ... 11 (SKIP TO 429) ← OTHER HOME ... 12 PUBLIC SECTOR GOVT. HOSPITAL 21 GOVT. HEALTH CENTER 22 GOVT. HEALTH POST 23 OTHER PUBLIC _____ 26 (SPECIFY) MISSION HOSPITAL 31 HEALTH CENTER. 32 PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC 41 OTHER PRIVATE MED. _____ 46 (SPECIFY) TRAD. BIRTH ATTENDANT 51 OTHER _____ 96 (SPECIFY) ←	HOME YOUR HOME ... 11 (SKIP TO 429) ← OTHER HOME ... 12 PUBLIC SECTOR GOVT. HOSPITAL 21 GOVT. HEALTH CENTER 22 GOVT. HEALTH POST 23 OTHER PUBLIC _____ 26 (SPECIFY) MISSION HOSPITAL 31 HEALTH CENTER. 32 PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC 41 OTHER PRIVATE MED. _____ 46 (SPECIFY) TRAD. BIRTH ATTENDANT 51 OTHER _____ 96 (SPECIFY) ←	HOME YOUR HOME ... 11 (SKIP TO 429) ← OTHER HOME ... 12 PUBLIC SECTOR GOVT. HOSPITAL 21 GOVT. HEALTH CENTER 22 GOVT. HEALTH POST 23 OTHER PUBLIC _____ 26 (SPECIFY) MISSION HOSPITAL 31 HEALTH CENTER. 32 PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC 41 OTHER PRIVATE MED. _____ 46 (SPECIFY) TRAD. BIRTH ATTENDANT 51 OTHER _____ 96 (SPECIFY) ←

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
		(SKIP TO 429) ← <input type="checkbox"/>	(SKIP TO 429) ← <input type="checkbox"/>	(SKIP TO 429) ← <input type="checkbox"/>
428	Was (NAME) delivered by caesarean section?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____					
429	After (NAME) was born, did a health professional or a traditional birth attendant check on your health?	YES 1 NO 2 (SKIP TO 432A) ←	YES 1 NO 2	YES 1 NO 2					
430	How many days or weeks after delivery did the first check take place? RECORD '00' DAYS IF SAME DAY.	DAYS AFTER DEL 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> WEEKS AFTER DEL 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> DON'T KNOW ... 998							
431	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PROFESSIONAL DOCTOR/CLINICAL OFFICER 11 NURSE/MIDWIFE ... 12 PATIENT ATTNDT... 13 OTHER PERSON TRADITIONAL BIRTH ATTENDANT ... 21 OTHER _____ 96 (SPECIFY)							
432	Where did this first check take place? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	HOME YOUR HOME ... 11 OTHER HOME ... 12 PUBLIC SECTOR GOVT. HOSPITAL 21 GOVT. HEALTH CENTER 22 GOVT. HEALTH POST 23 OTHER PUBLIC _____ (SPECIFY) 26 MISSION HOSPITAL 31 HEALTH CENTER. 32 PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC 41 OTHER PRIVATE MED. _____ 46 (SPECIFY) TRAD. BIRTH ATTENDANT 51 OTHER _____ 96 (SPECIFY)							

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____						
432A	After this birth, did you experience a problem such as: Heavy bleeding? High blood pressure? Stroke/convulsions? Infection/fever? Leakage of urine or stool from your vagina? Post-partum depression/blues?	<p style="text-align: center;">DON'T</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">YES</td> <td style="width: 33%;">NO</td> <td style="width: 33%;">KNOW</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> </table>	YES	NO	KNOW	1	2	8		
YES	NO	KNOW								
1	2	8								
433	In the first two months after delivery, did you receive a vitamin A dose like this? SHOW AMPULE/CAPSULE.	YES 1 NO 2								
434	Has your period returned since the birth of (NAME)?	YES 1 (SKIP TO 436) ←┘ NO 2 (SKIP TO 437) ←┘								
435	Did your period return between the birth of (NAME) and your next pregnancy?	YES 1 NO 2 (SKIP TO 439) ←┘	YES 1 NO 2 (SKIP TO 439) ←┘							
436	For how many months after the birth of (NAME) did you <u>not</u> have a period?	MONTHS ... <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> DON'T KNOW 98	MONTHS ... <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> DON'T KNOW 98	MONTHS ... <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> DON'T KNOW 98						
437	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREG- <input type="checkbox"/> PREGNANT NANT OR <input type="checkbox"/> UNSURE (SKIP TO 439) ←								
438	Have you resumed sexual relations since the birth of (NAME)?	YES 1 NO 2 (SKIP TO 440) ←┘								
439	For how many months after the birth of (NAME) did you <u>not</u> have sexual relations?	MONTHS ... <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> DON'T KNOW 98	MONTHS ... <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> DON'T KNOW 98	MONTHS ... <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> DON'T KNOW 98						
440	Did you ever breastfeed (NAME)?	YES 1 NO 2 (SKIP TO 447) ←┘	YES 1 NO 2 (SKIP TO 447) ←┘	YES 1 NO 2 (SKIP TO 447) ←┘						
441	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY ... 000 HOURS . 1 <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> DAYS ... 2 <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/>	IMMEDIATELY ... 000 HOURS . 1 <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> DAYS ... 2 <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/>	IMMEDIATELY ... 000 HOURS . 1 <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> DAYS ... 2 <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/>						
442	In the first three days after delivery, before your milk began flowing regularly, was (NAME) given anything to drink other than breast milk?	YES 1 NO 2 (SKIP TO 444) ←┘	YES 1 NO 2 (SKIP TO 444) ←┘	YES 1 NO 2 (SKIP TO 444) ←┘						

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
443	What was (NAME) given to drink before your milk began flowing regularly? Anything else? RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) . A PLAIN WATER ... B SUGAR OR GLUCOSE WATER ... C GRIPPE WATER ... D SUGAR-SALT-WATER SOLUTION E FRUIT JUICE F INFANT FORMULA . G TEA/INFUSIONS ... H HONEY I OTHER _____ X (SPECIFY)	MILK (OTHER THAN BREAST MILK) . A PLAIN WATER ... B SUGAR OR GLUCOSE WATER . C GRIPPE WATER ... D SUGAR-SALT-WATER SOLUTION E FRUIT JUICE F INFANT FORMULA . G TEA/INFUSIONS ... H HONEY I OTHER _____ X (SPECIFY)	MILK (OTHER THAN BREAST MILK) . A PLAIN WATER ... B SUGAR OR GLUCOSE WATER . C GRIPPE WATER ... D SUGAR-SALT-WATER SOLUTION E FRUIT JUICE F INFANT FORMULA . G TEA/INFUSIONS ... H HONEY I OTHER _____ X (SPECIFY)
444	CHECK 404: IS CHILD LIVING?	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 446) ←	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 446) ←	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 446) ←
445	Are you still breastfeeding (NAME)?	YES 1 (SKIP TO 448) ← NO 2	YES 1 (SKIP TO 448) ← NO 2	YES 1 (SKIP TO 448) ← NO 2
446	For how many months did you breastfeed (NAME)?	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ... 98	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ... 98	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ... 98
447	CHECK 404: IS CHILD LIVING?	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 454) (SKIP TO 450)	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 454) (SKIP TO 450)	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 454) (SKIP TO 450)
448	How many times did you breastfeed last night between sunset and sunrise? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF NIGHTTIME FEEDINGS . <input type="text"/> <input type="text"/>	NUMBER OF NIGHTTIME FEEDINGS . <input type="text"/> <input type="text"/>	NUMBER OF NIGHTTIME FEEDINGS . <input type="text"/> <input type="text"/>
449	How many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF DAYLIGHT FEEDINGS . <input type="text"/> <input type="text"/>	NUMBER OF DAYLIGHT FEEDINGS . <input type="text"/> <input type="text"/>	NUMBER OF DAYLIGHT FEEDINGS . <input type="text"/> <input type="text"/>
450	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
		NAME _____	NAME _____	NAME _____
451	Was sugar added to any of the foods or liquids (NAME) ate yesterday?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
452	How many times did (NAME) eat solid, semisolid, or soft foods other than liquids yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF <input type="text"/> TIMES DON'T KNOW 8	NUMBER OF <input type="text"/> TIMES DON'T KNOW 8	NUMBER OF <input type="text"/> TIMES DON'T KNOW 8
453		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 454.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 454.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 454.

SECTION 4B. IMMUNIZATION, HEALTH AND NUTRITION

454	ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 1999 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).										
455	LINE NUMBER FROM 212	LAST BIRTH LINE NUMBER <input type="text"/> <input type="text"/>	NEXT-TO-LAST BIRTH LINE NUMBER <input type="text"/> <input type="text"/>	SECOND-FROM-LAST BIRTH LINE NUMBER <input type="text"/> <input type="text"/>							
456	FROM 212 AND 216	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> ↓ (GO TO 456 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 486)	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> ↓ (GO TO 456 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 486)	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> ↓ (GO TO 456 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE BIRTHS, GO TO 486)							
457	Did (NAME) receive a vitamin A dose like this during the last 6 months? SHOW CAPSULE	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8							
458	Do you have a card or booklet where (NAME'S) vaccinations are written down? IF YES: May I see it please?	YES, SEEN 1 (SKIP TO 460) ← YES, NOT SEEN 2 (SKIP TO 462) ← NO CARD 3	YES, SEEN 1 (SKIP TO 460) ← YES, NOT SEEN 2 (SKIP TO 462) ← NO CARD 3	YES, SEEN 1 (SKIP TO 460) ← YES, NOT SEEN 2 (SKIP TO 462) ← NO CARD 3							
459	Did you ever have a vaccination card for (NAME)?	YES 1 (SKIP TO 462) ← NO 2	YES 1 (SKIP TO 462) ← NO 2	YES 1 (SKIP TO 462) ← NO 2							
460	(1) COPY VACCINATION DATE FOR EACH VACCINE FROM THE CARD OR BOOKLET. (2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED.										
		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH							
		DAY MONTH YEAR	DAY MONTH YEAR	DAY MONTH YEAR							
BCG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BCG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BCG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
POLIO 0 (BEFORE 14 DAYS OLD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	P0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	P0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
POLIO 1 (AT 6 WEEKS OLD OR LATER)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	P1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	P1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
POLIO 2 (1 MONTH AFTER 1ST DOSE)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	P2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	P2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
POLIO 3 (1 MONTH AFTER 2ND DOSE)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	P3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	P3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DPT 1 (AT 6 WEEKS OLD OR LATER)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DPT 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DPT 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MEASLES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MEA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MEA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VITAMIN A (MOST RECENT)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VIT A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VIT A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
461	Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations received in a national immunization day campaign? RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, POLIO 0-3, DPT 1-3, AND/OR MEASLES VACCINE(S).	YES 1 (PROBE FOR ← VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 460) (SKIP TO 464) ←	YES 1 (PROBE FOR ← VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 460) (SKIP TO 464) ←	YES 1 (PROBE FOR ← VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 460) (SKIP TO 464) ←
		NO 2 (SKIP TO 464) ←	NO 2 (SKIP TO 464) ←	NO 2 (SKIP TO 464) ←
		DON'T KNOW 8	DON'T KNOW 8	DON'T KNOW 8
462	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization day campaign?	YES 1	YES 1	YES 1
		NO 2 (SKIP TO 466) ←	NO 2 (SKIP TO 466) ←	NO 2 (SKIP TO 466) ←
		DON'T KNOW 8	DON'T KNOW 8	DON'T KNOW 8
463	Please tell me if (NAME) received any of the following vaccinations:			
463A	A BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES 1	YES 1	YES 1
		NO 2	NO 2	NO 2
		DON'T KNOW 8	DON'T KNOW 8	DON'T KNOW 8
463B	Polio vaccine, that is, drops in the mouth?	YES 1	YES 1	YES 1
		NO 2 (SKIP TO 463E) ←	NO 2 (SKIP TO 463E) ←	NO 2 (SKIP TO 463E) ←
		DON'T KNOW 8	DON'T KNOW 8	DON'T KNOW 8
463C	When was the first polio vaccine received, just after birth or later?	JUST AFTER BIRTH 1 LATER 2	JUST AFTER BIRTH 1 LATER 2	JUST AFTER BIRTH 1 LATER 2
463D	How many times was the polio vaccine received?	NUMBER OF TIMES <input type="text"/>	NUMBER OF TIMES <input type="text"/>	NUMBER OF TIMES <input type="text"/>
463E	A DPT vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops?	YES 1	YES 1	YES 1
		NO 2 (SKIP TO 463G) ←	NO 2 (SKIP TO 463G) ←	NO 2 (SKIP TO 463G) ←
		DON'T KNOW 8	DON'T KNOW 8	DON'T KNOW 8
463F	How many times?	NUMBER OF TIMES <input type="text"/>	NUMBER OF TIMES <input type="text"/>	NUMBER OF TIMES <input type="text"/>
463G	An injection to prevent measles?	YES 1	YES 1	YES 1
		NO 2	NO 2	NO 2
		DON'T KNOW 8	DON'T KNOW 8	DON'T KNOW 8
464	Were any of the vaccinations (NAME) received during the last two years given as part of a national immunization day campaign?	YES 1	YES 1	YES 1
		NO 2	NO 2	NO 2
		NO VACCINATION IN THE LAST 2 YRS. 3	NO VACCINATION IN THE LAST 2 YRS. 3	NO VACCINATION IN THE LAST 2 YRS. 3
		DON'T KNOW 8	DON'T KNOW 8	DON'T KNOW 8

		LAST BIRTH				NEXT-TO-LAST BIRTH				SECOND-FROM-LAST BIRTH						
		NAME _____				NAME _____				NAME _____						
466	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES 1 NO 2 DON'T KNOW 8 (SKIP TO 467) ←				YES 1 NO 2 DON'T KNOW 8 (SKIP TO 467) ←				YES 1 NO 2 DON'T KNOW 8 (SKIP TO 467) ←						
466A	I would like to know what things were done in response to (NAME's) fever. What was done first? What was done after that? NOTE: CIRCLE ONE CODE IN EACH COLUMN FOR THE FIRST FOUR ACTIONS. EACH COLUMN SHOULD HAVE ONLY ONE CODE CIRCLED. ALL COLUMNS SHOULD CONTAIN AN ACTION.		1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th		
		GAVE MEDICINE FROM HOME	01	01	01	01	01	01	01	01	01	01	01	01	01	
		GAVE MEDICINE FROM A PHARMACIST /SHOPKEEPER (WITHOUT A PRESCRIPTION)	02	02	02	02	02	02	02	02	02	02	02	02	02	
		TAKEN TO A GOVERNMENT-RUN HEALTH CENTER	03	03	03	03	03	03	03	03	03	03	03	03	03	
		TAKEN TO A MISSION HEALTH CENTER	04	04	04	04	04	04	04	04	04	04	04	04	04	
		TAKEN TO A PRIVATE HEALTH CENTER	05	05	05	05	05	05	05	05	05	05	05	05	05	
		CONSULTED TRADITIONAL HEALER	06	06	06	06	06	06	06	06	06	06	06	06	06	
		CONSULTED COMMUNITY HEALTH WORKER	07	07	07	07	07	07	07	07	07	07	07	07	07	07
		GAVE TEPID SPONGING	08	08	08	08	08	08	08	08	08	08	08	08	08	
		GAVE HERBS AT HOME	09	09	09	09	09	09	09	09	09	09	09	09	09	
		OTHER	10	10	10	10	10	10	10	10	10	10	10	10	10	
		DID NOTHING (ELSE)	11	11	11	11	11	11	11	11	11	11	11	11	11	
		DONT KNOW	12	12	12	12	12	12	12	12	12	12	12	12	12	
466B		CHECK 466A: CODE "01" OR CODE "02" CIRCLED IN ANY COLUMN <input type="checkbox"/>		CODE "01" OR "02" NOT CIRCLED <input type="checkbox"/> (SKIP TO 466E)		CHECK 466A: CODE "01" OR CODE "02" CIRCLED IN ANY COLUMN <input type="checkbox"/>		CODE "01" OR "02" NOT CIRCLED <input type="checkbox"/> (SKIP TO 466E)		CHECK 466A: CODE "01" OR CODE "02" CIRCLED IN ANY COLUMN <input type="checkbox"/>		CODE "01" OR "02" NOT CIRCLED <input type="checkbox"/> (SKIP TO 466E)				

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
466C	Which medicines were given to (NAME)? RECORD ALL MENTIONED. ASK TO SEE DRUG(S) IF TYPE OF DRUG IS NOT KNOWN. IF TYPE OF DRUG IS STILL NOT DETERMINED, SHOW TYPICAL ANTIMALARIAL DRUGS TO RESPONDENT.	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER _____ X (SPECIFY) DON'T KNOW..... Z IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466E	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER _____ X (SPECIFY) DON'T KNOW..... Z IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466E	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER _____ X (SPECIFY) DON'T KNOW..... Z IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466E
466D	IF CHILD WITH FEVER TOOK AN ANTI-MALARIAL MEDICINE: How long after the fever started did (NAME) start taking the medicine?	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3
466E		CHECK 466A: CODE "03" CODE "03" CIRCLED IN ANY COLUMN <input type="checkbox"/> <input type="checkbox"/> NOT CIRCLED <input type="checkbox"/> (SKIP TO 466J)	CHECK 466A: CODE "03" CODE "03" CIRCLED IN ANY COLUMN <input type="checkbox"/> <input type="checkbox"/> NOT CIRCLED <input type="checkbox"/> (SKIP TO 466J)	CHECK 466A: CODE "03" CODE "03" CIRCLED IN ANY COLUMN <input type="checkbox"/> <input type="checkbox"/> NOT CIRCLED <input type="checkbox"/> (SKIP TO 466J)
466F	How long after you noticed the fever was (NAME) taken to a government-run health center?	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3
466G	Were any drugs or prescriptions for drugs given at the government-run health center for (NAME)?	YES 1 NO 2 (SKIP TO 466J) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 466J) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 466J) ← DON'T KNOW 8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
466H	Which medicines were given to (NAME)? RECORD ALL MENTIONED. ASK TO SEE DRUG(S) IF TYPE OF DRUG IS NOT KNOWN. IF TYPE OF DRUG IS STILL NOT DETERMINED, SHOW TYPICAL ANTIMALARIAL DRUGS TO RESPONDENT.	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER_____ X (SPECIFY) DON'T KNOW..... Z ← IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466J	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER_____ X (SPECIFY) DON'T KNOW..... Z ← IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466J	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER_____ X (SPECIFY) DON'T KNOW..... Z ← IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466J
466I	IF CHILD WITH FEVER TOOK AN ANTI-MALARIAL MEDICINE: How long after the fever started did (NAME) start taking the medicine?	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3
466J		CHECK 466A: CODE "04" CODE "04" CIRCLED IN NOT ANY COLUMN CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓ ↓ (SKIP TO 466O)	CHECK 466A: CODE "04" CODE "04" CIRCLED IN NOT ANY COLUMN CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓ ↓ (SKIP TO 466O)	CHECK 466A: CODE "04" CODE "04" CIRCLED IN NOT ANY COLUMN CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓ ↓ (SKIP TO 466O)
466K	How long after you noticed the fever was (NAME) taken to a mission health center?	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3
466L	Were any drugs or prescriptions for drugs given at the mission health center for (NAME)?	YES 1 NO 2 (SKIP TO 466O) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 466O) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 466O) ← DON'T KNOW 8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
466M	Which medicines were given to (NAME)? RECORD ALL MENTIONED. ASK TO SEE DRUG(S) IF TYPE OF DRUG IS NOT KNOWN. IF TYPE OF DRUG IS STILL NOT DETERMINED, SHOW TYPICAL ANTIMALARIAL DRUGS TO RESPONDENT.	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER _____ X (SPECIFY) DON'T KNOW..... Z ← IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466O	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER _____ X (SPECIFY) DON'T KNOW..... Z ← IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466O	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER _____ X (SPECIFY) DON'T KNOW..... Z ← IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466O
466N	IF CHILD WITH FEVER TOOK AN ANTI-MALARIAL MEDICINE: How long after the fever started did (NAME) start taking the medicine?	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3
466O		CHECK 466A: CODE "05" CODE "05" NOT CIRCLED IN CIRCLED ANY COLUMN <input type="checkbox"/> <input type="checkbox"/> ↓ ↓ (SKIP TO 466T)	CHECK 466A: CODE "05" CODE "05" NOT CIRCLED IN CIRCLED ANY COLUMN <input type="checkbox"/> <input type="checkbox"/> ↓ ↓ (SKIP TO 466T)	CHECK 466A: CODE "05" CODE "05" NOT CIRCLED IN CIRCLED ANY COLUMN <input type="checkbox"/> <input type="checkbox"/> ↓ ↓ (SKIP TO 466T)
466P	How long after you noticed the fever was (NAME) taken to a private health center?	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3
466Q	Were any drugs or prescriptions for drugs given at the private health center for (NAME)?	YES 1 NO 2 (SKIP TO 466T) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 466T) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 466T) ← DON'T KNOW 8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
466R	Which medicines were given to (NAME)? RECORD ALL MENTIONED. ASK TO SEE DRUG(S) IF TYPE OF DRUG IS NOT KNOWN. IF TYPE OF DRUG IS STILL NOT DETERMINED, SHOW TYPICAL ANTIMALARIAL DRUGS TO RESPONDENT.	ANTI-MALARIAL SP/FANSIDAR ... A CHLOROQUINE ... B AMODIAQUINE ... C QUININE D ARTESUNATE E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER _____ X (SPECIFY) DON'T KNOW Z IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466T ←	ANTI-MALARIAL SP/FANSIDAR ... A CHLOROQUINE ... B AMODIAQUINE ... C QUININE D ARTESUNATE E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER _____ X (SPECIFY) DON'T KNOW Z IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466T ←	ANTI-MALARIAL SP/FANSIDAR ... A CHLOROQUINE ... B AMODIAQUINE ... C QUININE D ARTESUNATE E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER _____ X (SPECIFY) DON'T KNOW Z IF NO ANTI-MALARIAL CIRCLED, SKIP TO 466T ←
466S	IF CHILD WITH FEVER TOOK AN ANTI-MALARIAL MEDICINE: How long after the fever started did (NAME) start taking the medicine?	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3
466T		CHECK 466A: CODE "07" CODE "07" CIRCLED IN NOT ANY COLUMN CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓ (SKIP TO 467)	CHECK 466A: CODE "07" CODE "07" CIRCLED IN NOT ANY COLUMN CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓ (SKIP TO 467)	CHECK 466A: CODE "07" CODE "07" CIRCLED IN NOT ANY COLUMN CIRCLED <input type="checkbox"/> <input type="checkbox"/> ↓ (SKIP TO 467)
466U	How long after you noticed the fever did (NAME) see the community health worker?	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3
466V	What did the community health worker do?	GAVE MEDICINE ... 1 RECOMMENDED PURCHASE OF MEDICINE 2 REFERRED TO HEALTH CENTER/ DOCTOR 3 OTHER _____ 4 SPECIFY (SKIP TO 467) ←	GAVE MEDICINE ... 1 RECOMMENDED PURCHASE OF MEDICINE 2 REFERRED TO HEALTH CENTER/ DOCTOR 3 OTHER _____ 4 SPECIFY (SKIP TO 467) ←	GAVE MEDICINE ... 1 RECOMMENDED PURCHASE OF MEDICINE 2 REFERRED TO HEALTH CENTER/ DOCTOR 3 OTHER _____ 4 SPECIFY (SKIP TO 467) ←

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
466W	Which medicines were given to (NAME)? RECORD ALL MENTIONED. ASK TO SEE DRUG(S) IF TYPE OF DRUG IS NOT KNOWN. IF TYPE OF DRUG IS STILL NOT DETERMINED, SHOW TYPICAL ANTIMALARIAL DRUGS TO RESPONDENT.	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER_____ X (SPECIFY) DON'T KNOW..... Z ← IF NO ANTI-MALARIAL CIRCLED, SKIP TO 467	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER_____ X (SPECIFY) DON'T KNOW..... Z ← IF NO ANTI-MALARIAL CIRCLED, SKIP TO 467	ANTI-MALARIAL SP/FANSIDAR..... A CHLOROQUINE..... B AMODIAQUINE..... C QUININE..... D ARTESUNATE..... E OTHER DRUGS ASPIRIN F IBUPROFEN/ ACETAMINOPHEN/ PANADOL/ PARACETAMOL ... G OTHER_____ X (SPECIFY) DON'T KNOW..... Z ← IF NO ANTI-MALARIAL CIRCLED, SKIP TO 467
466X	IF CHILD WITH FEVER TOOK AN ANTI-MALARIAL MEDICINE: How long after the fever started did (NAME) start taking the medicine?	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3	SAME DAY 0 NEXT DAY AFTER THE FEVER 1 2 DAYS AFTER THE FEVER 2 3 OR MORE DAYS AFTER THE FEVER 3
467	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES 1 NO 2 (SKIP TO 472) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 472) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 472) ← DON'T KNOW 8
468	When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
470	Did you seek advice or treatment for the cough?	YES 1 NO 2 (SKIP TO 472) ←	YES 1 NO 2 (SKIP TO 472) ←	YES 1 NO 2 (SKIP TO 472) ←

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
471	Where did you seek advice or treatment? Anywhere else? RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR GOVT HOSPITAL . A GOVT HEALTH CENTER B GOVT HEALTH POST C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC _____ F (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL . A GOVT HEALTH CENTER B GOVT HEALTH POST C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC _____ F (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL . A GOVT HEALTH CENTER B GOVT HEALTH POST C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC _____ F (SPECIFY)
		MISSION HOSPITAL G HEALTH CENTER H MOBILE CLINIC . I	MISSION HOSPITAL G HEALTH CENTER H MOBILE CLINIC . I	MISSION HOSPITAL G HEALTH CENTER H MOBILE CLINIC . I
		PRIVATE SECTOR PVT HOSPITAL/CLINIC J PHARMACY ... K PVT DOCTOR ... L MOBILE CLINIC . M FIELDWORKER . N OTHER PRIVATE MED. _____ O (SPECIFY)	PRIVATE SECTOR PVT HOSPITAL/CLINIC J PHARMACY ... K PVT DOCTOR ... L MOBILE CLINIC . M FIELDWORKER . N OTHER PRIVATE MED. _____ O (SPECIFY)	PRIVATE SECTOR PVT HOSPITAL/CLINIC J PHARMACY ... K PVT DOCTOR ... L MOBILE CLINIC . M FIELDWORKER . N OTHER PRIVATE MED. _____ O (SPECIFY)
		OTHER SOURCE SHOP P TRAD. PRACTITIONER Q OTHER _____ X (SPECIFY)	OTHER SOURCE SHOP P TRAD. PRACTITIONER Q OTHER _____ X (SPECIFY)	OTHER SOURCE SHOP P TRAD. PRACTITIONER Q OTHER _____ X (SPECIFY)
472	Has (NAME) been ill with convulsions at any time during the last 2 weeks?	YES 1 NO 2 (SKIP TO 475) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 475) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 475) ← DON'T KNOW 8
472A	Did you seek advice or treatment for the convulsions?	YES 1 NO 2 (SKIP TO 475) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 475) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 475) ← DON'T KNOW 8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
472B	Where did you seek advice or treatment? Anywhere else? RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR GOVT HOSPITAL . A GOVT HEALTH CENTER B GOVT HEALTH POST C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC _____ F (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL . A GOVT HEALTH CENTER B GOVT HEALTH POST C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC _____ F (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL . A GOVT HEALTH CENTER B GOVT HEALTH POST C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC _____ F (SPECIFY)
		MISSION HOSPITAL G HEALTH CENTER H MOBILE CLINIC . I	MISSION HOSPITAL G HEALTH CENTER H MOBILE CLINIC . I	MISSION HOSPITAL G HEALTH CENTER H MOBILE CLINIC . I
		PRIVATE SECTOR PVT HOSPITAL/CLINIC J PHARMACY ... K PVT DOCTOR ... L MOBILE CLINIC . M FIELDWORKER . N OTHER PRIVATE MED. _____ O (SPECIFY)	PRIVATE SECTOR PVT HOSPITAL/CLINIC J PHARMACY ... K PVT DOCTOR ... L MOBILE CLINIC . M FIELDWORKER . N OTHER PRIVATE MED. _____ O (SPECIFY)	PRIVATE SECTOR PVT HOSPITAL/CLINIC J PHARMACY ... K PVT DOCTOR ... L MOBILE CLINIC . M FIELDWORKER . N OTHER PRIVATE MED. _____ O (SPECIFY)
		OTHER SOURCE SHOP P TRAD. PRACTITIONER Q OTHER _____ X (SPECIFY)	OTHER SOURCE SHOP P TRAD. PRACTITIONER Q OTHER _____ X (SPECIFY)	OTHER SOURCE SHOP P TRAD. PRACTITIONER Q OTHER _____ X (SPECIFY)
472C	How long after the convulsions started was (NAME) taken for treatment?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER CONVULSIONS . 2 THREE OR MORE DAYS AFTER THE CONVULSIONS . 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER THE FEVER 2 THREE OR MORE DAYS AFTER THE FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER THE FEVER 2 THREE OR MORE DAYS AFTER THE FEVER 3 DON'T KNOW 8
475	Has (NAME) had diarrhea in the last 2 weeks?	YES 1 NO 2 (SKIP TO 483) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 483) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 483) ← DON'T KNOW 8
476	Now I would like to know how much (NAME) was offered to drink during the diarrhea. Was he/she offered less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she offered much less than usual to drink or somewhat less?	MUCH LESS 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE 4 NOTHING TO DRINK 5 DON'T KNOW 8

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
477	When (NAME) had diarrhea, was he/she offered less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she offered much less than usual to eat or somewhat less?	MUCH LESS 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW 8
478	Was he/she given fluid to drink made from a special packet called THANZI-ORS?	YES NO DK GAVE THANZI ... 1 2 8	YES NO DK GAVE THANZI ... 1 2 8	YES NO DK GAVE THANZI ... 1 2 8
479	Was anything (else) given to treat the diarrhea?	YES 1 NO 2 (SKIP TO 481) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 481) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 481) ← DON'T KNOW 8
480	What was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	PILL OR SYRUP ... A INJECTION B (IV) INTRAVENOUS . C HOME REMEDIES/ HERBAL MEDICINES D OTHER _____ X (SPECIFY)	PILL OR SYRUP ... A INJECTION B (IV) INTRAVENOUS . C HOME REMEDIES/ HERBAL MEDICINES D OTHER _____ X (SPECIFY)	PILL OR SYRUP ... A INJECTION B (IV) INTRAVENOUS . C HOME REMEDIES/ HERBAL MEDICINES D OTHER _____ X (SPECIFY)
481	Did you seek advice or treatment for the diarrhea?	YES 1 NO 2 (SKIP TO 483) ←	YES 1 NO 2 (SKIP TO 483) ←	YES 1 NO 2 (SKIP TO 483) ←

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
482	<p>Where did you seek advice or treatment?</p> <p>IF SOURCE IS A HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p> <p>Anywhere else?</p> <p>RECORD ALL PLACES MENTIONED.</p>	<p>PUBLIC SECTOR</p> <p>GOVT HOSPITAL . A</p> <p>GOVT HEALTH CENTER B</p> <p>GOVT HEALTH POST C</p> <p>MOBILE CLINIC . D</p> <p>FIELDWORKER . E</p> <p>OTHER PUBLIC _____ F</p> <p>(SPECIFY)</p> <p>MISSION</p> <p>HOSPITAL G</p> <p>HEALTH CENTER H</p> <p>MOBILE CLINIC . I</p> <p>PRIVATE SECTOR</p> <p>PVT HOSPITAL/CLINIC J</p> <p>PHARMACY K</p> <p>PVT DOCTOR L</p> <p>MOBILE CLINIC . M</p> <p>FIELDWORKER . N</p> <p>OTHER PRIVATE MED. _____ O</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP P</p> <p>TRAD. PRACTITIONER Q</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	<p>PUBLIC SECTOR</p> <p>GOVT HOSPITAL . A</p> <p>GOVT HEALTH CENTER B</p> <p>GOVT HEALTH POST C</p> <p>MOBILE CLINIC . D</p> <p>FIELDWORKER . E</p> <p>OTHER PUBLIC _____ F</p> <p>(SPECIFY)</p> <p>MISSION</p> <p>HOSPITAL G</p> <p>HEALTH CENTER H</p> <p>MOBILE CLINIC . I</p> <p>PRIVATE SECTOR</p> <p>PVT HOSPITAL/CLINIC J</p> <p>PHARMACY K</p> <p>PVT DOCTOR L</p> <p>MOBILE CLINIC . M</p> <p>FIELDWORKER . N</p> <p>OTHER PRIVATE MED. _____ O</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP P</p> <p>TRAD. PRACTITIONER Q</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	<p>PUBLIC SECTOR</p> <p>GOVT HOSPITAL . A</p> <p>GOVT HEALTH CENTER B</p> <p>GOVT HEALTH POST C</p> <p>MOBILE CLINIC . D</p> <p>FIELDWORKER . E</p> <p>OTHER PUBLIC _____ F</p> <p>(SPECIFY)</p> <p>MISSION</p> <p>HOSPITAL G</p> <p>HEALTH CENTER H</p> <p>MOBILE CLINIC . I</p> <p>PRIVATE SECTOR</p> <p>PVT HOSPITAL/CLINIC J</p> <p>PHARMACY K</p> <p>PVT DOCTOR L</p> <p>MOBILE CLINIC . M</p> <p>FIELDWORKER . N</p> <p>OTHER PRIVATE MED. _____ O</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP P</p> <p>TRAD. PRACTITIONER Q</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>
483		GO BACK TO 456 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 486.	GO BACK TO 456 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 486.	GO BACK TO 456 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 486.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
486	CHECK 478, ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET (THANZI) <input type="checkbox"/>	ANY CHILD RECEIVED FLUID FROM ORS PACKET (THANZI) <input type="checkbox"/>	491
487	Have you ever heard of a special product called THANZI-ORS you can get for the treatment of diarrhea?	YES 1 NO 2	
491	CHECK 215 AND 218: HAS AT LEAST ONE CHILD BORN IN 2001 OR LATER AND LIVING WITH HER <input type="checkbox"/> RECORD NAME OF YOUNGEST CHILD LIVING WITH HER (AND CONTINUE TO 492) _____ (NAME)	DOES NOT HAVE ANY CHILDREN BORN IN 2001 OR LATER AND LIVING WITH HER <input type="checkbox"/>	494

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
492	<p>Now I would like to ask you about liquids (NAME FROM Q. 491) drank yesterday.</p> <p>In total, how many <u>times</u> yesterday during the day or at night did (NAME FROM Q. 491) drink (ITEM)?</p> <p>a Plain water?</p> <p>b Commercially produced infant formula?</p> <p>c Any other milk such as tinned, powdered, or fresh animal milk?</p> <p>d Fruit juice?</p> <p>e Any other liquids?</p> <p>IF 7 OR MORE TIMES, RECORD '7'. IF DON'T KNOW, RECORD '8'.</p>	<p>NUMBER OF TIMES</p> <p>a <input type="text"/></p> <p>b <input type="text"/></p> <p>c <input type="text"/></p> <p>d <input type="text"/></p> <p>e <input type="text"/></p>	
493	<p>Now I would like to ask you about the types of foods (NAME FROM Q. 491) ate yesterday.</p> <p>In total, how many <u>times</u> yesterday during the day or at night did (NAME FROM Q. 491) eat (ITEM)?</p> <p>a Bread, scone, maize meal (ngaiwa), maize flour (ufawoyera), millet, rice, sorghum, or any other food made from grains?</p> <p>b Pumpkin, red or yellow yams or squash, carrots, or yellow/orange sweet potatoes?</p> <p>c Any other food made from roots or tubers, for example cocoyams, irish potatoes, white sweet potatoes, white yams, cassava, or other local roots or tubers?</p> <p>d Any dark green leafy vegetables such as amaranth, cassava, pumpkin, or sweet potato leaves, chinese cabbage, greens, kale, or other dark green leafy vegetables?</p> <p>e Mango or papaya?</p> <p>f Any other fruits and vegetables [for example, bananas, apples, green beans, avocados, tomatoes]?</p> <p>g Meat, poultry, fish, shellfish, insects, rodents, or eggs?</p> <p>h Any food made from legumes [for example, beans, soybeans, groundnuts, lentils, pigeon peas, or cowpeas]?</p> <p>i Cheese, milk or yoghurt?</p> <p>j Any food made with oil, fat, margarine or butter?</p> <p>k Any other foods?</p> <p>IF 7 OR MORE TIMES, RECORD '7'. IF DON'T KNOW, RECORD '8'.</p>	<p>NUMBER OF TIMES</p> <p>a <input type="text"/></p> <p>b <input type="text"/></p> <p>c <input type="text"/></p> <p>d <input type="text"/></p> <p>e <input type="text"/></p> <p>f <input type="text"/></p> <p>g <input type="text"/></p> <p>h <input type="text"/></p> <p>i <input type="text"/></p> <p>j <input type="text"/></p> <p>k <input type="text"/></p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																											
494	<p>Now I would like to ask you some questions about medical care for you yourself.</p> <p>Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not?</p> <p>Knowing where to go.</p> <p>Getting permission to go.</p> <p>Getting money needed for treatment.</p> <p>The time required to cover the distance to the health facility.</p> <p>The availability of means of transport.</p> <p>The cost of transport.</p> <p>Not wanting to go alone.</p> <p>Concern that there may not be a female health provider.</p>	<table border="0"> <tr> <td></td> <td style="text-align: center;">BIG PROB- LEM</td> <td style="text-align: center;">NOT A BIG PROB- LEM</td> </tr> <tr> <td>WHERE TO GO</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>PERMISSION TO GO . . .</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>GETTING MONEY</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>DISTANCE</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MEANS OF TRANSPORT .</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>COST OF TRANSPOR' . . .</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>GO ALONE</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>NO FEMALE PROV. . . .</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </table>		BIG PROB- LEM	NOT A BIG PROB- LEM	WHERE TO GO	1	2	PERMISSION TO GO . . .	1	2	GETTING MONEY	1	2	DISTANCE	1	2	MEANS OF TRANSPORT .	1	2	COST OF TRANSPOR' . . .	1	2	GO ALONE	1	2	NO FEMALE PROV. . . .	1	2	
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GO ALONE	1	2																												
NO FEMALE PROV. . . .	1	2																												
494A	<p>CHECK 432A:</p> <p>DID NOT REPORT LEAKAGE OF URINE OR STOOL AFTER THIS PREGNANCY, OR WAS NOT ASKED QUESTION <input type="checkbox"/></p> <p>REPORTED EXPERIENCING LEAKAGE OF URINE OR STOOL AFTER THIS PREGNANCY <input type="checkbox"/> → 495</p>																													
494B	<p>Sometimes a woman can have a problem, usually after a difficult childbirth, such that she experiences a leakage of urine or stool from her vagina.</p> <p>Have you ever experienced this problem?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>																												
495	<p>In the past 12 months, did you receive any injections?</p>	<p>YES 1</p> <p>NO 2</p>	→ 501																											
495A	<p>In the past 12 months, how many injections did you receive?</p>	<p>NUMBER <input type="text"/> <input type="text"/></p>																												
495B	<p>Who gave you the injection the last time you got it?</p>	<p>DOCTOR 1</p> <p>NURSE 2</p> <p>PHARMACIST 3</p> <p>DRUG VENDOR 4</p> <p>SELF-ADMINISTERED 5</p> <p>FRIEND OR FAMILY 6</p> <p>LOCAL INJECTION DOCTOR 7</p> <p>OTHER _____ 9</p> <p style="text-align: center;">SPECIFY</p>																												
496	<p>Do you currently smoke cigarettes or use tobacco?</p> <p>IF YES: What type of tobacco do you use?</p> <p>RECORD ALL TYPES MENTIONED.</p>	<p>YES, CIGARETTES A</p> <p>YES, PIPE B</p> <p>YES, OTHER TOBACCO C</p> <p>YES, CHEWING TOBACCO D</p> <p>YES, SNUFF E</p> <p>NO Y</p>																												
497	<p>Do you drink alcohol?</p>	<p>YES 1</p> <p>NO 2</p>	→ 501																											
498	<p>How often do you get drunk: very often, only sometimes, or never?</p>	<p>VERY OFTEN 1</p> <p>SOMETIMES 2</p> <p>NEVER 3</p>																												

SECTION 5. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	Are you currently married or living with a man?	YES, CURRENTLY MARRIED 1 YES, LIVING WITH A MAN 2 NO, NOT IN UNION 3	<input type="checkbox"/> → 505
502	Have you ever been married or lived with a man?	YES, FORMERLY MARRIED 1 YES, LIVED WITH A MAN 2 NO 3	→ 504 → 510
503	ENTER '0' IN COLUMN 4 OF CALENDAR IN THE MONTH OF INTERVIEW, AND IN EACH MONTH BACK TO JANUARY 1999 _____		→ 514
504	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED 1 DIVORCED 2 SEPARATED 3	<input type="checkbox"/> → 510
504A	Who did most of your late husband's property go to?	RESPONDENT 1 OTHER WIFE 2 SPOUSE'S CHILDREN 3 SPOUSE'S FAMILY 4 OTHER _____ 5 (SPECIFY) NO PROPERTY 6	→ 510
504B	Did you receive any of your late husband's assets or valuables?	YES 1 NO 2	<input type="checkbox"/> → 510
505	Is your husband/partner living with you now or is he staying elsewhere?	LIVING WITH HER 1 STAYING ELSEWHERE 2	
506	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'. NAME _____ LINE NO. <input type="text"/> <input type="text"/>		
507	Does your husband/partner have any other wives besides yourself?	YES 1 NO 2	→ 510
508	How many other wives does he have?	NUMBER <input type="text"/> <input type="text"/> DON'T KNOW 98	→ 510
509	Are you the first, second, ... wife?	RANK <input type="text"/> <input type="text"/>	
510	Have you been married or lived with a man only once, or more than once?	ONLY ONCE 1 MORE THAN ONCE 2	
511	CHECK 510: MARRIED/ LIVED WITH A MAN <input type="checkbox"/> ONLY ONCE ↓ In what month and year did you start living with your husband/partner? MARRIED/ LIVED WITH A MAN <input type="checkbox"/> MORE THAN ONCE ↓ Now we will talk about your first husband/partner. In what month and year did you start living with him?	MONTH <input type="text"/> <input type="text"/> DON'T KNOW MONTH 98 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR 9998	→ 513
512	How old were you when you started living with him?	AGE <input type="text"/> <input type="text"/>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
513	<p>DETERMINE MONTHS MARRIED OR LIVING WITH A MAN SINCE JANUARY 1999. ENTER 'X' IN COLUMN 4 OF CALENDAR FOR EACH MONTH MARRIED OR LIVING WITH A MAN, AND ENTER 'O' FOR EACH MONTH NOT MARRIED/NOT LIVING WITH A MAN, SINCE JANUARY 1999.</p> <p>FOR WOMEN WITH MORE THAN ONE UNION: PROBE FOR DATE WHEN CURRENT UNION STARTED AND, IF APPROPRIATE, FOR STARTING AND TERMINATION DATES OF ANY PREVIOUS UNIONS.</p> <p>FOR WOMEN NOT CURRENTLY IN UNION: PROBE FOR DATE WHEN LAST UNION STARTED AND FOR TERMINATION DATE AND, IF APPROPRIATE, FOR THE STARTING AND TERMINATION DATES OF ANY PREVIOUS UNIONS.</p>		
514	<p>Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues.</p> <p>How old were you when you first had sexual intercourse (if ever)?</p>	<p>NEVER 00</p> <p>AGE IN YEARS <input type="text"/> <input type="text"/></p> <p>FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER 95</p>	→ 524
514A	<p>CHECK 106:</p> <p>15-24 YEARS OLD <input type="checkbox"/></p> <p>25-49 YEARS OLD <input type="checkbox"/></p>		→ 515
514B	<p>The <u>first</u> time you had sexual intercourse, was a condom used?</p>	<p>YES 1</p> <p>NO 2</p>	
514C	<p>How old was the person you first had sexual intercourse with?</p>	<p>AGE OF PARTNER <input type="text"/> <input type="text"/></p> <p>DON'T KNOW 98</p>	→ 515
514D	<p>Was this person older than you, younger than you, or about the same age as you?</p>	<p>OLDER 1</p> <p>YOUNGER 2</p> <p>SAME AGE 3</p> <p>DON'T KNOW/DON'T REMEMBER 8</p>	→ 515
514E	<p>Would you say this person was ten or more years older than you, or less than ten years older than you?</p>	<p>TEN OR MORE YEARS OLDER 1</p> <p>LESS THAN TEN YEARS OLDER 2</p> <p>OLDER, UNSURE HOW MUCH 3</p>	
515	<p>When was the <u>last</u> time you had sexual intercourse?</p> <p>RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO. IF 12 MONTHS OR MORE, ANSWER MUST BE RECORDED IN YEARS.</p>	<p>DAYS AGO 1</p> <p>WEEKS AGO 2</p> <p>MONTHS AGO 3</p> <p>YEARS AGO 4</p>	→ 524
516	<p>The last time you had sexual intercourse, was a condom used?</p>	<p>YES 1</p> <p>NO 2</p>	→ 517
516A	<p>What was the main reason you used a condom on that occasion?</p>	<p>RESPONDENT WANTED TO PREVENT STD/HIV 01</p> <p>RESPONDENT WANTED TO PREVENT PREGNANCY 02</p> <p>RESPONDENT WANTED TO PREVENT BOTH STD/HIV AND PREGNANCY 03</p> <p>DID NOT TRUST PARTNER/FELT PARTNER HAD OTHER PARTNERS 04</p> <p>PARTNER REQUESTED/INSISTED 05</p> <p>OTHER 96</p> <p>(SPECIFY)</p> <p>DON'T KNOW 98</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
517	<p>What is your relationship to the man with whom you last had sex?</p> <p>IF MAN IS "BOYFRIEND" OR "FIANCÉ", ASK: Was your boyfriend/fiancé living with you when you last had sex?</p> <p>IF YES, CIRCLE '01'. IF NO, CIRCLE '02'.</p>	SPOUSE/COHABITING PARTNER . 01 MAN IS BOYFRIEND/FIANCÉ 02 OTHER FRIEND 03 CASUAL ACQUAINTANCE 04 RELATIVE 05 PROSTITUTE 06 OTHER _____ 96 (SPECIFY)	→ 519								
517A	<p>CHECK 106:</p> <p>15-24 YEARS OLD <input type="checkbox"/></p> <p>25-49 YEARS OLD <input type="checkbox"/></p>		→ 518								
517B	<p>Was this man younger, about the same age or older than you?</p> <p>IF OLDER: Do you think that he was less than 10 years older than you or 10 or more years older than you?</p>	YOUNGER 1 ABOUT SAME AGE 2 LESS THAN 10 YEARS OLDER 3 10 OR MORE YEARS OLDER 4 OLDER, DON'T KNOW DIFFERENCE 5 DON'T KNOW 8									
518	<p>For how long (have you had/did you have) sexual relations with this man?</p> <p>IF ONLY HAD SEXUAL RELATIONS WITH THIS MAN ONCE, RECORD '01' DAYS.</p>	DAYS 1 WEEKS 2 MONTHS 3 YEARS 4 <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
519	<p>Have you had sex with any other man in the last 12 months?</p>	YES 1 NO 2	→ 524								
520	<p>The last time you had sexual intercourse with another man, was a condom used?</p>	YES 1 NO 2	→ 521								
520A	<p>What was the main reason you used a condom on that occasion?</p>	RESPONDENT WANTED TO PREVENT STD/HIV 01 RESPONDENT WANTED TO PREVENT PREGNANCY 02 RESPONDENT WANTED TO PREVENT BOTH STD/HIV AND PREGNANCY 03 DID NOT TRUST PARTNER/FELT PARTNER HAD OTHER PARTNERS 04 PARTNER REQUESTED/INSISTED 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98									
521	<p>What is your relationship to this man?</p> <p>IF MAN IS "BOYFRIEND" OR "FIANCÉ", ASK: Was your boyfriend/fiancé living with you when you last had sex with him?</p> <p>IF YES, CIRCLE '01'. IF NO, CIRCLE '02'.</p>	SPOUSE/COHABITING PARTNER . 01 MAN IS BOYFRIEND/FIANCÉ 02 OTHER FRIEND 03 CASUAL ACQUAINTANCE 04 RELATIVE 05 PROSTITUTE 06 OTHER _____ 96 (SPECIFY)	→ 522A								

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
521A	CHECK 106: <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> 15-24 YEARS OLD <input type="checkbox"/> </div> <div style="text-align: center;"> 25-49 YEARS OLD <input type="checkbox"/> </div> </div>		→ 522								
521B	Was this man younger, about the same age or older than you? IF OLDER: Do you think that he was less than 10 years older than you or 10 or more years older than you?	YOUNGER 1 ABOUT SAME AGE 2 LESS THAN 10 YEARS OLDER 3 10 OR MORE YEARS OLDER 4 OLDER, DON'T KNOW DIFFERENCE 5 DON'T KNOW 8									
522	For how long (have you had/did you have) sexual relations with this man? IF ONLY HAD SEXUAL RELATIONS WITH THIS MAN ONCE, RECORD '01' DAYS.	DAYS 1 WEEKS 2 MONTHS 3 YEARS 4 <table border="1" style="display: inline-table; vertical-align: middle; margin-left: 20px;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>									
522A	Other than these two men, have you had sex with any other man in the last 12 months?	YES 1 NO 2	→ 524								
522B	The last time you had sexual intercourse with this other man, was a condom used?	YES 1 NO 2	→ 522D								
522C	What was the main reason you used a condom on that occasion?	RESPONDENT WANTED TO PREVENT STD/HIV 01 RESPONDENT WANTED TO PREVENT PREGNANCY 02 RESPONDENT WANTED TO PREVENT BOTH STD/HIV AND PREGNANCY 03 DID NOT TRUST PARTNERS/FELT PARTNER HAD OTHER PARTNERS 04 PARTNER REQUESTED/INSISTED 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98									
522D	What is your relationship to this man? IF MAN IS "BOYFRIEND" OR "FIANCÉ", ASK: Was your boyfriend/fiancé living with you when you last had sex with him? IF YES, CIRCLE '01'. IF NO, CIRCLE '02'.	SPOUSE/COHABITING PARTNER . 01 MAN IS BOYFRIEND/FIANCÉ 02 OTHER FRIEND 03 CASUAL ACQUAINTANCE 04 RELATIVE 05 PROSTITUTE 06 OTHER _____ 96 (SPECIFY)	→ 523								
522D1	CHECK 106: <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> 15-24 YEARS OLD <input type="checkbox"/> </div> <div style="text-align: center;"> 25-49 YEARS OLD <input type="checkbox"/> </div> </div>		→ 522E								
522D2	Was this man younger, about the same age or older than you? IF OLDER: Do you think that he was less than 10 years older than you or 10 or more years older than you?	YOUNGER 1 ABOUT SAME AGE 2 LESS THAN 10 YEARS OLDER 3 10 OR MORE YEARS OLDER 4 OLDER, DON'T KNOW DIFFERENCE 5 DON'T KNOW 8									

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
522E	For how long (have you had/did you have) sexual relations with this man? IF ONLY HAD SEXUAL RELATIONS WITH THIS MAN ONCE, RECORD '01' DAYS.	DAYS 1 <input type="text"/> <input type="text"/> WEEKS 2 <input type="text"/> <input type="text"/> MONTHS 3 <input type="text"/> <input type="text"/> YEARS 4 <input type="text"/> <input type="text"/>	
523	In total, with how many different men have you had sex in the last 12 months?	NUMBER OF PARTNERS ... <input type="text"/> <input type="text"/>	
524	Do you know of a place where a person can get condoms?	YES 1 NO 2	→ 527
525	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE) Any other place? RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR GOVERNMENT HOSPITAL A GOVT. HEALTH CENTER B FAMILY PLANNING CLINIC C MOBILE CLINIC D FIELDWORKER E OTHER PUBLIC _____ F (SPECIFY) MISSION HOSPITAL G HEALTH CENTER H MOBILE CLINIC I PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC J PHARMACY K PRIVATE DOCTOR L MOBILE CLINIC M FIELDWORKER N OTHER PRIVATE MEDICAL _____ O (SPECIFY) BLM P OTHER SOURCE SHOP Q CHURCH R FRIENDS/RELATIVES S OTHER _____ X (SPECIFY)	
526	If you wanted to, could you yourself get a condom?	YES 1 NO 2 DON'T KNOW/UNSURE 8	
527	Have you heard of a condom called "Chishango"?	YES 1 NO 2 DON'T KNOW 8	

SECTION 6. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP				
601	<p>CHECK 311/311A:</p> <p>NEITHER STERILIZED <input type="checkbox"/></p> <p>HE OR SHE STERILIZED <input type="checkbox"/></p>		→ 614				
602	<p>CHECK 226:</p> <p>NOT PREGNANT OR UNSURE <input type="checkbox"/></p> <p>PREGNANT <input type="checkbox"/></p> <p>Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?</p> <p>Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?</p>	<p>HAVE (A/ANOTHER) CHILD 1</p> <p>NO MORE/NONE 2</p> <p>SAYS SHE CAN'T GET PREGNANT . 3</p> <p>UNDECIDED/DK: PREGNANT 4</p> <p>UNDEC/DK: NOT PREGNANT/UNSURE 5</p>	<p>→ 604</p> <p>→ 614</p> <p>→ 610</p> <p>→ 608</p>				
603	<p>CHECK 226:</p> <p>NOT PREGNANT OR UNSURE <input type="checkbox"/></p> <p>PREGNANT <input type="checkbox"/></p> <p>How long would you like to wait from now before the birth of (a/another) child?</p> <p>After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?</p>	<p>MONTHS 1</p> <p>YEARS 2</p> <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table> <p>SOON/NOW 993</p> <p>SAYS SHE CAN'T GET PREGNANT 994</p> <p>AFTER MARRIAGE 995</p> <p>OTHER _____ 996</p> <p>(SPECIFY)</p> <p>DON'T KNOW 998</p>					<p>→ 609</p> <p>→ 614</p> <p>→ 609</p>
604	<p>CHECK 226:</p> <p>NOT PREGNANT OR UNSURE <input type="checkbox"/></p> <p>PREGNANT <input type="checkbox"/></p>		→ 610				
605	<p>CHECK 310: USING A CONTRACEPTIVE METHOD?</p> <p>NOT ASKED <input type="checkbox"/></p> <p>NOT CURRENTLY USING <input type="checkbox"/></p> <p>CURRENTLY USING <input type="checkbox"/></p>		→ 608				
606	<p>CHECK 603:</p> <p>NOT ASKED <input type="checkbox"/></p> <p>24 OR MORE MONTHS OR 02 OR MORE YEARS <input type="checkbox"/></p> <p>00-23 MONTHS OR 00-01 YEAR <input type="checkbox"/></p>		→ 610				

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
607	<p>CHECK 602:</p> <p>WANTS TO HAVE A/ANOTHER CHILD <input type="checkbox"/></p> <p>WANTS NO MORE/NONE <input type="checkbox"/></p> <p>You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. Can you tell me why?</p> <p>You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. Can you tell me why?</p> <p>Any other reason? _____</p> <p>Any other reason? _____</p> <p>RECORD ALL REASONS MENTIONED.</p>	<p>NOT MARRIED A</p> <p>FERTILITY-RELATED REASONS</p> <p>NOT HAVING SEX B</p> <p>INFREQUENT SEX C</p> <p>MENOPAUSAL/HYSTERECTOMY . D</p> <p>SUBFECUND/INFECUND E</p> <p>POSTPARTUM AMENORRHEIC ... F</p> <p>BREASTFEEDING G</p> <p>FATALISTIC H</p> <p>OPPOSITION TO USE</p> <p>RESPONDENT OPPOSED I</p> <p>HUSBAND/PARTNER OPPOSED . J</p> <p>OTHERS OPPOSED K</p> <p>RELIGIOUS PROHIBITION L</p> <p>LACK OF KNOWLEDGE</p> <p>KNOWS NO METHOD M</p> <p>KNOWS NO SOURCE N</p> <p>METHOD-RELATED REASONS</p> <p>HEALTH CONCERNS O</p> <p>FEAR OF SIDE EFFECTS P</p> <p>LACK OF ACCESS/TOO FAR Q</p> <p>COSTS TOO MUCH R</p> <p>INCONVENIENT TO USE S</p> <p>INTERFERES WITH BODY'S NORMAL PROCESSES T</p> <p>OTHER _____ X (SPECIFY)</p> <p>DON'T KNOW Z</p>	
608	<p>In the next few weeks, if you discovered that you were pregnant, would that be a big problem, a small problem, or no problem for you?</p>	<p>BIG PROBLEM 1</p> <p>SMALL PROBLEM 2</p> <p>NO PROBLEM 3</p> <p>SAYS SHE CAN'T GET PREGNANT/ NOT HAVING SEX 4</p>	
609	<p>CHECK 310: USING A CONTRACEPTIVE METHOD?</p> <p>NOT ASKED <input type="checkbox"/> NO, NOT CURRENTLY USING <input type="checkbox"/> YES, CURRENTLY USING <input type="checkbox"/></p>		<p>→ 614</p>
610	<p>Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	<p>→ 612</p>
611	<p>Which contraceptive method would you prefer to use?</p>	<p>FEMALE STERILIZATION 01</p> <p>MALE STERILIZATION 02</p> <p>PILL 03</p> <p>IUD 04</p> <p>INJECTABLES 05</p> <p>IMPLANTS 06</p> <p>CONDOM 07</p> <p>FEMALE CONDOM 08</p> <p>PERIODIC ABSTINENCE 12</p> <p>WITHDRAWAL 13</p> <p>OTHER _____ 96 (SPECIFY)</p> <p>UNSURE 98</p>	<p>→ 614</p>

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	What is the main reason that you think you will not use a contraceptive method at any time in the future?	NOT MARRIED 11 FERTILITY-RELATED REASONS INFREQUENT SEX/NO SEX ... 22 MENOPAUSAL/HYSTERECTOMY 23 SUBFECUND/INFECUND 24 WANTS AS MANY CHILDREN AS POSSIBLE 26 OPPOSITION TO USE RESPONDENT OPPOSED 31 HUSBAND/PARTNER OPPOSED 32 OTHERS OPPOSED 33 RELIGIOUS PROHIBITION 34 LACK OF KNOWLEDGE KNOWS NO METHOD 41 KNOWS NO SOURCE 42 METHOD-RELATED REASONS HEALTH CONCERNS 51 FEAR OF SIDE EFFECTS 52 LACK OF ACCESS/TOO FAR ... 53 COSTS TOO MUCH 54 INCONVENIENT TO USE 55 INTERFERES WITH BODY'S NORMAL PROCESSES 56 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 614
613	Would you ever use a contraceptive method if you were married?	YES 1 NO 2 DON'T KNOW 8	
614	CHECK 216: HAS LIVING CHILDREN <input type="checkbox"/> NO LIVING CHILDREN <input type="checkbox"/> ↓ ↓ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE 00 NUMBER <input type="text"/> <input type="text"/> OTHER _____ 96 (SPECIFY)	→ 616 → 616
615	How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?	BOYS GIRLS EITHER NUMBER <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> OTHER _____ 96 (SPECIFY)	
616	Would you say that you approve or disapprove of couples using a contraceptive method to avoid getting pregnant?	APPROVE 1 DISAPPROVE 2 DON'T KNOW/UNSURE 8	
617	In the last few months have you heard about family planning: On the radio? On the television? In a newspaper or magazine? On a poster? On clothing (i.e., cap, chitenji, t-shirt)? In a drama? Somewhere else? (SPECIFY)	YES NO RADIO 1 2 TELEVISION 1 2 NEWSPAPER OR MAGAZINE ... 1 2 POSTER 1 2 CLOTHING 1 2 DRAMA 1 2 OTHER _____ (SPECIFY).. 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
618	In the last few months, have you listened to any of the following program series about family planning or health on the radio?		
		YES NO	
	Uchembere Wabwino?	UCHEMBERE WABWINO . . . 1 2	
	Phukusi la Moyo?	PHUKUSI LA MOYO . . . 1 2	
	Pa Mtondo?	PA MTONDO 1 2	
	Women's Talking Point?	WOMEN'S TALKING PT . . . 1 2	
	Window Through Health?	WINDOW THRU HEALTH . . . 1 2	
	Umoyo M'Malawi?	UMOYO M'MALAWI 1 2	
	Tikuferanji?	TIKUFERANJI 1 2	
	Radio Doctor?	RADIO DOCTOR 1 2	
	Chitukuku M'Malawi?	CHITUKUKU M'MALAWI . . . 1 2	
	Women's Forum?	WOMEN'S FORUM 1 2	
	Tichitenji?	TICHITENJI 1 2	
	Kulera?	KULERA 1 2	
	Other? (SPECIFY)	OTHER_____ (SPECIFY) 1 2	
619	In the last few months, have you discussed the practice of family planning with your friends, neighbors, or relatives?	YES 1 NO 2	→ 621
620	With whom? Anyone else? RECORD ALL PERSONS MENTIONED.	HUSBAND/PARTNER A MOTHER B FATHER C SISTER(S) D BROTHER(S) E DAUGHTER(S) F SON(S) G MOTHER(S)-IN-LAW H FRIENDS/NEIGHBORS I OTHER _____ X (SPECIFY)	
621	CHECK 501: YES, <input type="checkbox"/> CURRENTLY MARRIED YES, <input type="checkbox"/> LIVING WITH A MAN NO, <input type="checkbox"/> NOT IN UNION		→ 628
622	CHECK 311/311A: ANY CODE <input type="checkbox"/> CIRCLED NO CODE <input type="checkbox"/> CIRCLED		→ 624
623	You have told me that you are currently using contraception. Would you say that using contraception is mainly your decision, mainly your husband's/partner's decision or did you both decide together?	MAINLY RESPONDENT 1 MAINLY HUSBAND/PARTNER 2 JOINT DECISION 3 OTHER _____ 6 (SPECIFY)	
624	Now I want to ask you about your husband's/partner's views on family planning. Do you think that your husband/partner approves or disapproves of couples using a contraceptive method to avoid pregnancy?	APPROVES 1 DISAPPROVES 2 DON'T KNOW 8	
625	How often have you talked to your husband/partner about family planning in the past year?	NEVER 1 ONCE OR TWICE 2 MORE OFTEN 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																				
626	CHECK 311/311A: NEITHER <input type="checkbox"/> HE OR SHE <input type="checkbox"/> STERILIZED STERILIZED		→ 628																				
627	Do you think your husband/partner wants the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER 1 MORE CHILDREN 2 FEWER CHILDREN 3 DON'T KNOW 8																					
628	Husbands and wives do not always agree on everything. Please tell me if you think a wife is justified in refusing to have sex with her husband when: She knows her husband has a sexually transmitted disease? She knows her husband has sex with women other than his wife or wives? She has recently given birth? She is tired or not in the mood?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">YES</th> <th style="width: 10%; text-align: center;">NO</th> <th style="width: 10%; text-align: center;">DK</th> </tr> </thead> <tbody> <tr> <td>HAS STD</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>OTHER WOMEN</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>RECENT BIRTH</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>TIRED/NOT IN MOOD</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> </tbody> </table>		YES	NO	DK	HAS STD	1	2	8	OTHER WOMEN	1	2	8	RECENT BIRTH	1	2	8	TIRED/NOT IN MOOD	1	2	8	
	YES	NO	DK																				
HAS STD	1	2	8																				
OTHER WOMEN	1	2	8																				
RECENT BIRTH	1	2	8																				
TIRED/NOT IN MOOD	1	2	8																				
628A	When a wife knows her husband has a sexually transmitted disease, is she justified in asking that they use a condom?	YES 1 NO 2 DON'T KNOW 8																					

SECTION 7. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 501 AND 502: CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/> FORMERLY MARRIED/ LIVED WITH A MAN <input type="checkbox"/> NEVER MARRIED AND NEVER LIVED WITH A MAN <input type="checkbox"/>		→ 703 → 707
702	How old was your husband/partner on his last birthday?	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
703	Did your (last) husband/partner ever attend school?	YES 1 NO 2	→ 706
704	What was the highest level of school he attended: primary, secondary, or higher?	PRIMARY 1 SECONDARY 2 HIGHER 3 DON'T KNOW 8	→ 706
705	What was the highest (class/form/year) he completed at that level?	CLASS <input type="text"/> <input type="text"/> DON'T KNOW 98	
706	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/> FORMERLY MARRIED/ LIVED WITH A MAN <input type="checkbox"/> What is your husband's/partner's occupation? That is, what kind of work does he mainly do? What was your (last) husband's/ partner's occupation? That is, what kind of work did he mainly do?	<input type="text"/> <input type="text"/> <hr/> <hr/> <hr/>	
707	Aside from your own housework, are you currently working?	YES 1 NO 2	→ 710
708	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. Are you currently doing any of these things or any other work?	YES 1 NO 2	→ 710
709	Have you done any work in the last 12 months?	YES 1 NO 2	→ 719
710	What is your occupation, that is, what kind of work do you mainly do?	<input type="text"/> <input type="text"/> <hr/> <hr/>	
711	CHECK 710: WORKS IN AGRICULTURE <input type="checkbox"/> DOES NOT WORK IN AGRICULTURE <input type="checkbox"/>		→ 713
712	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	OWN LAND 1 FAMILY LAND 2 RENTED LAND 3 SOMEONE ELSE'S LAND 4	
713	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER 1 FOR SOMEONE ELSE 2 SELF-EMPLOYED 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
714	Do you usually work at home or away from home?	HOME 1 AWAY 2	
715	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR 1 SEASONALLY/PART OF THE YEAR . 2 ONCE IN A WHILE 3	
716	Are you paid or do you earn in cash or kind for this work or are you not paid at all?	CASH ONLY 1 CASH AND KIND 2 IN KIND ONLY 3 NOT PAID 4	→ 719
717	Who mainly decides how the money you earn will be used?	RESPONDENT 1 HUSBAND/PARTNER 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY ... 3 SOMEONE ELSE 4 RESPONDENT AND SOMEONE ELSE JOINTLY 5	
718	On average, how much of your household's expenditures do your earnings pay for: almost none, less than half, about half, more than half, or all?	ALMOST NONE 1 LESS THAN HALF 2 ABOUT HALF 3 MORE THAN HALF 4 ALL 5 NONE, HER INCOME IS ALL SAVED . 6	
719	Who in your family usually has the final say on the following decisions: Your own health care? Making large household purchases? Making household purchases for daily needs? Visits to family or relatives? What food should be cooked each day?	RESPONDENT = 1 HUSBAND/PARTNER = 2 RESPONDENT & HUSBAND/PARTNER JOINTLY = 3 SOMEONE ELSE = 4 RESPONDENT & SOMEONE ELSE JOINTLY = 5 DECISION NOT MADE/NOT APPLICABLE = 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6	
720	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES/ PRES/ NOT LISTEN. NOT PRES LISTEN. CHILDREN < 10 1 2 8 HUSBAND 1 2 8 OTHER MALES 1 2 8 OTHER FEMALES ... 1 2 8	
721	Sometimes a husband is annoyed or angered by things that his wife does. In your opinion, is a husband justified in hitting or beating his wife in the following situations: If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food? If she has an extramarital affair?	YES NO DK GOES OUT 1 2 8 NEGL. CHILDREN ... 1 2 8 ARGUES 1 2 8 REFUSES SEX 1 2 8 BURNS FOOD 1 2 8 AFFAIR 1 2 8	
722	Sometimes a wife is annoyed or angered by things that her husband does. In your opinion, is a wife justified in hitting or beating her husband in the following situations: If he neglects to support the family financially? If he gets drunk frequently? If he argues with her? If he refuses to have sex with her? If he has sex with a woman who is not his wife?	YES NO DK NEGLECTS SUPPORT . 1 2 8 DRUNK 1 2 8 ARGUES 1 2 8 REFUSES SEX 1 2 8 SEX WITH ANOTHER . 1 2 8	

SECTION 8. HIV/AIDS AND OTHER SEXUALLY TRANSMITTED INFECTIONS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES 1 NO 2	→ 817A
802	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES 1 NO 2 DON'T KNOW 8	└→ 809
803	What can a person do? Anything else? RECORD ALL WAYS MENTIONED.	ABSTAIN FROM SEX A USE CONDOMS B LIMIT SEX TO ONE PARTNER/STAY FAITHFUL TO ONE PARTNER ... C LIMIT NUMBER OF SEXUAL PARTNERS D AVOID SEX WITH PROSTITUTES ... E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS F AVOID SEX WITH HOMOSEXUALS . G AVOID SEX WITH PERSONS WHO INJECT DRUGS INTRAVENOUSLY . H AVOID BLOOD TRANSFUSIONS I AVOID INJECTIONS J AVOID SHARING RAZORS/BLADES . K AVOID KISSING L AVOID MOSQUITO BITES M SEEK PROTECTION FROM TRADITIONAL PRACTITIONER ... N OTHER _____ W (SPECIFY) OTHER _____ X (SPECIFY) DON'T KNOW Z	
804	Can people reduce their chances of getting the AIDS virus by having just one sex partner who has no other partners?	YES 1 NO 2 DON'T KNOW 8	
805	Can people get the AIDS virus from mosquito bites?	YES 1 NO 2 DON'T KNOW 8	
806	Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex?	YES 1 NO 2 DON'T KNOW 8	
807	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES 1 NO 2 DON'T KNOW 8	
808	Can people reduce their chance of getting the AIDS virus by not having sex at all?	YES 1 NO 2 DON'T KNOW 8	
808A	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES 1 NO 2 DON'T KNOW 8	
809	Is it possible for a healthy-looking person to have the AIDS virus?	YES 1 NO 2 DON'T KNOW 8	
810	Do you know someone personally who has the virus that causes AIDS or someone who died of AIDS?	YES 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
811	Can the virus that causes AIDS be transmitted from a mother to a child?	YES 1 NO 2 DON'T KNOW 8	<input type="checkbox"/> → 813
812	Can the virus that causes AIDS be transmitted from a mother to a child: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. 1 2 8 DURING DELIVERY ... 1 2 8 BREASTFEEDING ... 1 2 8	
812A	CHECK 812: AT LEAST ONE 'YES' <input type="checkbox"/> ↓ OTHER <input type="checkbox"/> →		→ 812C
812B	Are there any special medications that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES 1 NO 2 DON'T KNOW 8	
812C	Is there any special medication that people infected with the AIDS virus can get from a doctor or a nurse?	YES 1 NO 2 DON'T KNOW 8	
813	CHECK 501: YES, CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/> ↓ NO, NOT IN UNION <input type="checkbox"/> →		→ 814A
814	Have you ever talked about ways to prevent getting the virus that causes AIDS with (your husband/the man you are living with)?	YES 1 NO 2	
814A	In your opinion, is it acceptable or unacceptable for AIDS to be discussed: on the radio? on the TV? in newspapers?	ACCEPT- NOT ABLE ACCEPT- ABLE ON THE RADIO 1 2 ON THE TV 1 2 IN NEWSPAPERS ... 1 2	
814B	Would you buy fresh vegetables from a vendor who has the AIDS virus?	YES 1 NO 2 DON'T KNOW 8	
814C	If a member of your family got infected with the virus that causes AIDS, would you fear disclosing their status?	YES 1 NO 2 DK/NOT SURE 8	
814D	If a member of your extended family such as a cousin died of AIDS and left orphaned children behind, would you be willing to take those children as part of your family?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
814E	If a female teacher has the AIDS virus, should she be allowed to continue teaching in the school?	CAN CONTINUE 1 SHOULD NOT CONTINUE 2 DK/NOT SURE/DEPENDS 8	
816	Should persons with the AIDS virus who work with other persons such as in a shop, office, or farm be allowed to continue their work or not?	CAN CONTINUE WORK 1 SHOULD NOT CONTINUE WORK ... 2 DK/NOT SURE/DEPENDS 8	
816A	Are people who have AIDS immoral?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
816B	Should children age 12-14 be taught about using a condom to avoid AIDS?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
816C	Do you think that condoms are safe to use?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
816D	Do you think that men and women who intend to marry should be tested for the AIDS virus before marriage?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
816E	Have you heard any radio spots or messages with regard to HIV/AIDS in the last 30 days?	YES 1 NO 2	
816F	Have you seen any TV spots or programs with regard to HIV/AIDS in the last 30 days?	YES 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
816G	Have you read articles, messages or advertisements about HIV/AIDS in a magazine or newspaper in the last 30 days?	YES 1 NO 2	
816H	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES 1 NO 2	→ 816L
816I	When was the last time you were tested?	LESS THAN 12 MONTHS 1 12-23 MONTHS 2 2 YEARS OR MORE 8	
816J	The last time you had the test, did you yourself ask for the test, was it offered to you and you accepted, or was it required?	ASKED FOR THE TEST 1 OFFERED AND ACCEPTED 2 REQUIRED 3	
816K	I don't want to know the results, but did you get the results of the test?	YES 1 NO 2	<input type="checkbox"/> → 816MX
816L	Do you know a place where you could go to get an AIDS test?	YES 1 NO 2	→ 816P
816M	Where can you go for the test?	PUBLIC SECTOR GOVERNMENT HOSPITAL 11 GOVT. HEALTH CENTER 12 FAMILY PLANNING CLINIC 13 MOBILE CLINIC 14 FIELDWORKER 15 OTHER PUBLIC _____ 16 (SPECIFY)	
816MX	Where did you go for the test? _____ (NAME OF PLACE) IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.	MISSION HOSPITAL 21 HEALTH CENTER 22 MOBILE CLINIC 23 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC 31 PHARMACY 32 PRIVATE DOCTOR 33 MOBILE CLINIC 34 FIELDWORKER 35 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY) BLM 41 MACRO 51 OTHER _____ 96 (SPECIFY)	
816P	CHECK 515: RESPONDENT HAD SEX IN THE 12 MONTHS PRIOR TO THE SURVEY <input type="checkbox"/>	RESPONDENT HAS NOT HAD SEX IN THE PAST 12 MONTHS, OR WAS NOT ASKED Q 515. <input type="checkbox"/>	→ 817A
817	Do you know the HIV status of any partner with whom you have had sex in the past year?	YES 1 NO 2	
817A	Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact?	YES 1 NO 2	→ 819A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
818	<p>If a man has a sexually transmitted disease, what symptoms might he have?</p> <p>Any others?</p> <p>RECORD ALL SYMPTOMS MENTIONED.</p>	<p>ABDOMINAL PAIN A</p> <p>GENITAL DISCHARGE/DRIPPING ... B</p> <p>FOUL SMELLING DISCHARGE C</p> <p>BURNING PAIN ON URINATION D</p> <p>REDNESS/INFLAMMATION IN GENITAL AREA E</p> <p>SWELLING IN GENITAL AREA F</p> <p>GENITAL SORES/ULCERS G</p> <p>GENITAL WARTS H</p> <p>GENITAL ITCHING I</p> <p>BLOOD IN URINE J</p> <p>LOSS OF WEIGHT K</p> <p>IMPOTENCE L</p> <p>OTHER _____ W (SPECIFY)</p> <p>OTHER _____ X (SPECIFY)</p> <p>NO SYMPTOMS Y</p> <p>DON'T KNOW Z</p>	
819	<p>If a woman has a sexually transmitted disease, what symptoms might she have?</p> <p>Any others?</p> <p>RECORD ALL SYMPTOMS MENTIONED.</p>	<p>ABDOMINAL PAIN A</p> <p>GENITAL DISCHARGE B</p> <p>FOUL SMELLING DISCHARGE C</p> <p>BURNING PAIN ON URINATION D</p> <p>REDNESS/INFLAMMATION IN GENITAL AREA E</p> <p>SWELLING IN GENITAL AREA F</p> <p>GENITAL SORES/ULCERS G</p> <p>GENITAL WARTS H</p> <p>GENITAL ITCHING I</p> <p>BLOOD IN URINE J</p> <p>LOSS OF WEIGHT K</p> <p>HARD TO GET PREGNANT/HAVE A CHILD L</p> <p>OTHER _____ W (SPECIFY)</p> <p>OTHER _____ X (SPECIFY)</p> <p>NO SYMPTOMS Y</p> <p>DON'T KNOW Z</p>	
819A	<p>CHECK 514:</p> <p>HAS HAD SEXUAL INTERCOURSE <input type="checkbox"/> HAS NOT HAD SEXUAL INTERCOURSE <input type="checkbox"/></p> <p style="text-align: right;">→ 901</p>		
819A1	<p>CHECK 817A:</p> <p>KNOWS STI <input type="checkbox"/> DOES NOT KNOW STI <input type="checkbox"/></p> <p style="text-align: right;">→ 819C</p>		
819B	<p>Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a sexually-transmitted disease?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	
819C	<p>Sometimes, women experience a bad smelling abnormal genital discharge.</p> <p>During the last 12 months, have you had a bad smelling abnormal genital discharge?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
819D	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES 1 NO 2 DON'T KNOW 8	
819E	CHECK 819B, 819C, 819D: HAS HAD AN INFECTION <input type="checkbox"/> ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW <input type="checkbox"/>		→ 901
819F	The last time you had (PROBLEM FROM 819B/819C/819D), did you seek any kind of advice or treatment?	YES 1 NO 2	→ 819H
819G	The last time you had (PROBLEM FROM 819B/819C/819D), did you do any of the following? Did you... Go to a clinic, hospital or private doctor? Consult a traditional healer? Seek advice or buy medicines in a shop or pharmacy? Ask for advice from friends or relatives?	YES NO CLINIC/HOSPITAL 1 2 TRADITIONAL HEALER 1 2 SHOP/PHARMACY 1 2 FRIENDS/RELATIVES 1 2	
819H	When you had (PROBLEM FROM 819B/819C/819D), did you inform the person with whom you were having sex?	YES 1 NO 2 SOME/NOT ALL 3 DID NOT HAVE PARTNER 4	→ 901
819I	When you had (PROBLEM FROM 819B/819C/819D), did you do something to avoid infecting your sexual partner(s)?	YES 1 NO 2 PARTNER ALREADY INFECTED ... 3	→ 901
819J	What did you do to avoid infecting your partner(s)? Did you... Use medicine? Stop having sex? Use a condom when having sex?	YES NO USE MEDICINE 1 2 STOP SEX 1 2 USE CONDOM 1 2	

SECTION 9. MATERNAL MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES						SKIP
901	Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died. How many children did your mother give birth to, including you?	NUMBER OF BIRTHS TO NATURAL MOTHER <input type="text"/> <input type="text"/>						
902	CHECK 901: <input type="checkbox"/> TWO OR MORE BIRTHS <input type="checkbox"/> ONLY ONE BIRTH (RESPONDENT ONLY) → 914							
903	How many of these births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS <input type="text"/> <input type="text"/>						
904	What was the name given to your oldest (next oldest) brother or sister?	(1) _____	(2) _____	(3) _____	(4) _____	(5) _____	(6) _____	
905	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	
906	Is (NAME) still alive?	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (2) ←	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (3) ←	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (4) ←	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (5) ←	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (6) ←	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (7) ←	
907	How old is (NAME)?	<input type="text"/> <input type="text"/> GO TO (2)	<input type="text"/> <input type="text"/> GO TO (3)	<input type="text"/> <input type="text"/> GO TO (4)	<input type="text"/> <input type="text"/> GO TO (5)	<input type="text"/> <input type="text"/> GO TO (6)	<input type="text"/> <input type="text"/> GO TO (7)	
908	How many years ago did (NAME) die?	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	
909	How old was (NAME) when he/she died?	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (2)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (3)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (4)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (5)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (6)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (7)	
910	Was (NAME) pregnant when she died?	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	
911	Did (NAME) die during childbirth?	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	
912	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2	
913	How many live born children did (NAME) give birth to during her lifetime (before this pregnancy)?	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	

IF NO MORE BROTHERS OR SISTERS, GO TO 914.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES						SKIP
904	What was the name given to your oldest (next oldest) brother or sister?	(7) _____	(8) _____	(9) _____	(10) _____	(11) _____	(12) _____	
905	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	
906	Is (NAME) still alive?	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (8) ←	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (9) ←	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (10) ←	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (11) ←	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (12) ←	YES ... 1 NO ... 2 GO TO 908 ← DK ... 8 GO TO (13) ←	
907	How old is (NAME)?	<input type="text"/> <input type="text"/> GO TO (8)	<input type="text"/> <input type="text"/> GO TO (9)	<input type="text"/> <input type="text"/> GO TO (10)	<input type="text"/> <input type="text"/> GO TO (11)	<input type="text"/> <input type="text"/> GO TO (12)	<input type="text"/> <input type="text"/> GO TO (13)	
908	How many years ago did (NAME) die?	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	
909	How old was (NAME) when he/she died?	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (8)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (9)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (10)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (11)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (12)	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (13)	
910	Was (NAME) pregnant when she died?	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	
911	Did (NAME) die during childbirth?	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	YES ... 1 GO TO 913 ← NO ... 2	
912	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2	YES ... 1 NO ... 2	
913	How many live born children did (NAME) give birth to during her lifetime (before this pregnancy)?	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	

IF NO MORE BROTHERS OR SISTERS, GO TO 914.

914	<p>CHECK Q910, 911 AND 912 FOR ALL SISTERS</p> <p><input type="checkbox"/> ANY YES ALL NO <input type="checkbox"/> → DV00 OR BLANK</p> <p>Just to make sure I have this right, you told me that your sister(s) _____ (NAME) died when she was (pregnant/delivering/just delivered). Is that correct? IF CORRECT, CONTINUE TO DV00. IF NOT, CORRECT QUESTIONNAIRE AND CONTINUE TO 914.</p>
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SECTION 10: DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																												
DV00	CHECK HOUSEHOLD QUESTIONNAIRE, COLUMN (8A): WOMAN SELECTED FOR THIS SECTION <input type="checkbox"/>	WOMAN NOT SELECTED <input type="checkbox"/>	→ DV29																												
DV01	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL EFFECTIVE PRIVACY IS ENSURED. PRIVACY OBTAINED 1 ↓	PRIVACY NOT POSSIBLE 2	→ DV28																												
<p>READ TO ALL RESPONDENTS:</p> <p>Now I would like to ask you questions about some other important aspects of a woman's life. I know that some of these questions are very personal. However, your answers are crucial for helping to understand the condition of women in Malawi. Let me assure you that your answers are completely confidential and will not be told to anyone.</p>																															
DV02	CHECK 501, 502, AND 504: CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/> ↓ (READ IN PAST TENSE)	WIDOWED/ SEPARATED/ DIVORCED <input type="checkbox"/> ↓ NEVER MARRIED/ NEVER LIVED WITH A MAN <input type="checkbox"/>	→ DV14																												
DV03	When two people marry or live together, they share both good and bad moments. In your relationship with your (last) husband/partner do (did) the following happen frequently, only sometimes, or never? a) He usually (spends/spent) his free time with you? b) He (consults/consulted) you on different household matters? c) He (is/was) affectionate with you? d) He (respects/respected) you and your wishes?	<table border="0"> <thead> <tr> <th></th> <th>FRE- QUENTLY</th> <th>SOME- TIMES</th> <th>NEV- ER</th> </tr> </thead> <tbody> <tr> <td>FREE TIME</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>CONSULTS</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>AFFECTIONATE ...</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>RESPECTS</td> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>		FRE- QUENTLY	SOME- TIMES	NEV- ER	FREE TIME	1	2	3	CONSULTS	1	2	3	AFFECTIONATE ...	1	2	3	RESPECTS	1	2	3									
	FRE- QUENTLY	SOME- TIMES	NEV- ER																												
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CONSULTS	1	2	3																												
AFFECTIONATE ...	1	2	3																												
RESPECTS	1	2	3																												
DV04	Now I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) husband/partner? a) He (is/was) jealous or angry if you (talk/talked) to other men? b) He frequently (accuses/accused) you of being unfaithful? c) He (does/did) not permit you to meet your female friends? d) He (tries/tried) to limit your contact with your family? e) He (insists/insisted) on knowing where you (are/were) at all times? f) He (does/did) not trust you with any money?	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>JEALOUS</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>ACCUSES</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>NOT MEET FRIENDS</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>NO FAMILY</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>WHERE YOU ARE .</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>MONEY</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		YES	NO	DK	JEALOUS	1	2	8	ACCUSES	1	2	8	NOT MEET FRIENDS	1	2	8	NO FAMILY	1	2	8	WHERE YOU ARE .	1	2	8	MONEY	1	2	8	
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NO FAMILY	1	2	8																												
WHERE YOU ARE .	1	2	8																												
MONEY	1	2	8																												
DV05	Now if you will permit me, I need to ask some more questions about your relationship with your (last) husband/ partner. 5A. (Does/did) your (last) husband/partner ever: a) say or do something to humiliate you in front of others? b) Threaten you or someone close to you with harm?	5B. How many times did this happen during the last 12 months? <table border="0"> <tr> <td>YES</td> <td>1 →</td> <td>TIMES IN LAST</td> <td></td> </tr> <tr> <td>NO</td> <td>2</td> <td>12 MONTHS</td> <td><input type="text"/> <input type="text"/></td> </tr> <tr> <td></td> <td>↓</td> <td></td> <td></td> </tr> <tr> <td>YES</td> <td>1 →</td> <td>TIMES IN LAST</td> <td></td> </tr> <tr> <td>NO</td> <td>2</td> <td>12 MONTHS</td> <td><input type="text"/> <input type="text"/></td> </tr> <tr> <td></td> <td>↓</td> <td></td> <td></td> </tr> </table>	YES	1 →	TIMES IN LAST		NO	2	12 MONTHS	<input type="text"/> <input type="text"/>		↓			YES	1 →	TIMES IN LAST		NO	2	12 MONTHS	<input type="text"/> <input type="text"/>		↓							
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	↓																														

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
DV06	<p>6A. (Does/did) your (last) husband/partner ever:</p> <p>a) push you, shake you, or throw something at you?</p> <p>b) slap you or twist your arm?</p> <p>c) punch you with his fist or with something that could hurt you?</p> <p>d) kick you or drag you?</p> <p>e) try to strangle you or burn you?</p> <p>f) threaten you with a knife, gun, or other type of weapon?</p> <p>g) attack you with a knife, gun, or other type of weapon?</p> <p>h) physically force you to have sexual intercourse with him even when you did not want to?</p> <p>i) force you to perform other sexual acts you did not want to?</p>	<p>6B. How many times did this happen during the last 12 months?</p> <p>YES 1 → TIMES IN LAST NO 2 12 MONTHS <input type="text"/> <input type="text"/></p> <p>↓</p> <p>YES 1 → TIMES IN LAST NO 2 12 MONTHS <input type="text"/> <input type="text"/></p> <p>↓</p> <p>YES 1 → TIMES IN LAST NO 2 12 MONTHS <input type="text"/> <input type="text"/></p> <p>↓</p> <p>YES 1 → TIMES IN LAST NO 2 12 MONTHS <input type="text"/> <input type="text"/></p> <p>↓</p> <p>YES 1 → TIMES IN LAST NO 2 12 MONTHS <input type="text"/> <input type="text"/></p> <p>↓</p> <p>YES 1 → TIMES IN LAST NO 2 12 MONTHS <input type="text"/> <input type="text"/></p> <p>↓</p> <p>YES 1 → TIMES IN LAST NO 2 12 MONTHS <input type="text"/> <input type="text"/></p> <p>↓</p> <p>YES 1 → TIMES IN LAST NO 2 12 MONTHS <input type="text"/> <input type="text"/></p> <p>↓</p>	
DV07	<p>CHECK DV06:</p> <p>AT LEAST ONE 'YES' <input type="checkbox"/></p> <p>NOT A SINGLE 'YES' <input type="checkbox"/></p>		→ DV09
DV08	<p>How long after you first got married to/started living with your (last) husband/partner did (this/any of these things) first happen?</p> <p>IF LESS THAN ONE YEAR, RECORD '00'.</p>	<p>NUMBER OF YEARS <input type="text"/> <input type="text"/></p> <p>BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95</p> <p>AFTER SEPARATION/DIVORCE 96</p>	
DV09	<p>9A. Did the following ever happen because of something your (last) husband/partner did to you:</p> <p>a) You had bruises and aches?</p> <p>b) You had an injury or a broken bone?</p> <p>c) You went to the doctor or health center as a result of something your husband/partner did to you?</p>	<p>9B. How many times did this happen during the last 12 months?</p> <p>YES 1 → TIMES IN LAST NO 2 12 MONTHS <input type="text"/> <input type="text"/></p> <p>↓</p> <p>YES 1 → TIMES IN LAST NO 2 12 MONTHS <input type="text"/> <input type="text"/></p> <p>↓</p> <p>YES 1 → TIMES IN LAST NO 2 12 MONTHS <input type="text"/> <input type="text"/></p> <p>↓</p>	
DV10	<p>Have you ever hit, slapped, kicked or done anything else to physically hurt your (last) husband/partner at times when he was not already beating or physically hurting you?</p>	<p>YES 1</p> <p>NO 2</p>	→ DV12
DV11	<p>In the last 12 months, how many times have you hit, slapped, kicked or done something to physically hurt your (last) husband/partner at a time when he was not already beating or physically hurting you?</p>	<p>NUMBER OF TIMES <input type="text"/> <input type="text"/></p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
DV12	Does (did) your husband/partner drink alcohol?	YES 1 NO 2	→ DV14
DV12A	How often does (did) he get drunk: very often, only sometimes, or never?	VERY OFTEN 1 SOMETIMES 2 NEVER 3	
DV14	CHECK 501, 502 & 504: MARRIED/LIVING WITH A MAN/SEPARATED/DIVORCED/WIDOWED From the time you were 15 years old has anyone other than your (current/last) husband/partner hit, slapped, kicked, or done anything else to hurt you physically? NEVER MARRIED/ NEVER LIVED WITH A MAN From the time you were 15 years old has anyone ever hit, slapped, kicked, or done anything else to hurt you physically?	YES 1 NO 2 NO ANSWER 6	→ DV19
DV15	Who has physically hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER A FATHER B STEP-MOTHER C STEP-FATHER D SISTER E BROTHER F DAUGHTER G SON H LATE/EX-HUSBAND/EX-PARTNER I CURRENT BOYFRIEND J FORMER BOYFRIEND K MOTHER-IN-LAW L FATHER-IN-LAW M OTHER FEMALE RELATIVE/IN-LAW N OTHER MALE RELATIVE/ IN-LAW O FEMALE FRIEND/ACQUAINTANCE P MALE FRIEND/ACQUAINTANCE Q TEACHER R EMPLOYER S STRANGER T OTHER _____ X (SPECIFY)	
DV16	CHECK DV15: MORE THAN ONE PERSON MENTIONED <input type="checkbox"/> ↓ ONLY ONE PERSON MENTIONED <input type="checkbox"/> →		→ DV18

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
DV17	Who has hit, slapped, kicked, or done something to physically hurt you most often?	MOTHER01 FATHER02 STEP-MOTHER03 STEP-FATHER04 SISTER05 BROTHER06 DAUGHTER07 SON08 LATE/EX-HUSBAND/EX-PARTNER09 CURRENT BOYFRIEND10 FORMER BOYFRIEND11 MOTHER-IN-LAW12 FATHER-IN-LAW13 OTHER FEMALE RELATIVE/IN-LAW14 OTHER MALE RELATIVE/ IN-LAW15 FEMALE FRIEND/ACQUAINTANCE16 MALE FRIEND/ACQUAINTANCE17 TEACHER18 EMPLOYER19 STRANGER20 OTHER _____ 96 (SPECIFY)	
DV18	In the last 12 months, how many times has this person hit, slapped, kicked, or done anything else to physically hurt you?	NUMBER OF TIMES <input type="text"/> <input type="text"/>	
DV19	CHECK 201 AND 226: HAS ONE OR MORE LIVE OR NON-LIVE BIRTHS OR IS CURRENTLY PREGNANT <input type="checkbox"/>	NO LIVE BIRTHS, NO NON-LIVE BIRTHS, AND IS NOT CURRENTLY PREGNANT <input type="checkbox"/>	→ DV21A
DV20	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES 1 NO 2	→ DV21A
DV21	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER A MOTHER B FATHER C STEP-MOTHER D STEP-FATHER E SISTER F BROTHER G DAUGHTER H SON I LATE/EX-HUSBAND/EX-PARTNER J CURRENT BOYFRIEND K FORMER BOYFRIEND L MOTHER-IN-LAW M FATHER-IN-LAW N OTHER FEMALE RELATIVE/IN-LAW O OTHER MALE RELATIVE/ IN-LAW P FEMALE FRIEND/ACQUAINTANCE Q MALE FRIEND/ACQUAINTANCE R TEACHER S EMPLOYER T STRANGER U OTHER _____ X (SPECIFY)	
DV21A	CHECK Q514: EVER HAD SEX? HAS EVER HAD SEX <input type="checkbox"/> NEVER HAD SEX <input type="checkbox"/>		→ DV22

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
DV21B	The first time you had sexual intercourse, would you say that you had it because you wanted to, or because you were forced to have it against your will?	WANTED TO 1 FORCED TO 2 REFUSED TO ANSWER/NO RESPNSE 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
DV21C	In the last 12 months, has anyone forced you to have sexual intercourse against your will?	YES 1 NO 2 REFUSED TO ANSWER/NO RESPNSE 3	
DV22	CHECK DV06, DV09, DV14, AND DV20: AT LEAST ONE 'YES' <input type="checkbox"/> ↓ NOT A SINGLE 'YES' <input type="checkbox"/>		→ DV26

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
DV23	Have you ever tried to get help to prevent or stop (this person/ these persons) from physically hurting you?	YES 1 NO 2	→ DV25
DV24	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	MOTHER A FATHER B SISTER C BROTHER D CURRENT/LAST/LATE HUSBAND/PARTNER E CURRENT/FORMER BOYFRIEND F MOTHER-IN-LAW G FATHER-IN-LAW H OTHER FEMALE RELATIVE/IN-LAW I OTHER MALE RELATIVE/ IN-LAW J FRIEND K NEIGHBOR L TEACHER M EMPLOYER N RELIGIOUS LEADER O DOCTOR/MEDICAL PERSONNE P POLICE Q LAWYER R OTHER _____ X (SPECIFY)	→ DV26
DV25	What is the main reason you have never sought help?	DON'T KNOW WHO TO GO TO 01 NO USE 02 PART OF LIFE 03 AFRAID OF DIVORCE/DESERTION 04 AFRAID OF FURTHER BEATINGS . . . 05 AFRAID OF GETTING PERSON BEATING HER INTO TROUBLE 06 EMBARRASSED 07 DON'T WANT TO DISGRACE FAMILY 08 OTHER _____ 96 (SPECIFY)	
DV26	As far as you know, did your father ever beat your mother?	YES 1 NO 2 DON'T KNOW 8	

THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.

DV27	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	YES ONCE	YES, MORE THAN ONCE	NO
	HUSBAND	1	2	3
	OTHER MALE ADULT	1	2	3
	FEMALE ADULT	1	2	3

DV28 INTERVIEWER'S COMMENTS / EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE

DV29	RECORD THE TIME.	HOUR	<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>					MINUTES	<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>				

SECTION 11. ANTHROPOMETRY, ANEMIA AND HIV TESTING

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
ANTHROPOMETRY			
1101	WEIGHT (KILOGRAMS): <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>		
1101A	HEIGHT (CENTIMETERS): <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>		
1101B	RESULT: MEASURED 1 REFUSED 2 ABSENT 3 OTHER _____ 6 (SPECIFY)		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
ANEMIA			
1102	CHECK 106: AGE IS 15-17 <input type="checkbox"/> AGE IS 18-54 <input type="checkbox"/>		→ 1105
1103	LINE NUMBER OF PARENT/ RESPONSIBLE ADULT: <input type="text"/> <input type="text"/> (FROM COLUMN 1 IN HOUSEHOLD SCHEDULE) (IF PARENT OR RESPONSIBLE ADULT IS NOT IN HOUSEHOLD, WRITE "00")		
1104	READ THE ANEMIA CONSENT STATEMENT TO THE PARENT OR RESPONSIBLE ADULT CIRCLE CODE AND SIGN	CONSENT _____ ... 1 (SIGN) REFUSED 2 NOT READ 8	→ 1106
1105	READ THE ANEMIA CONSENT STATEMENT TO THE WOMAN OR ADOLESCENT CIRCLE CODE AND SIGN	CONSENT _____ ... 1 (SIGN) REFUSED 2 NOT READ 8	→ 1106

REQUEST FOR CONSENT FOR ANEMIA TEST

As part of this survey, we are studying anemia among women and children. Anemia is a serious health problem. You do not have to participate; however, if you do, it will help the government to develop programs to prevent and treat anemia.

We request that you participate in the anemia testing part of this survey and give a few drops of blood from a finger or from the heel of the child. The test uses disposable sterile instruments that are clean and completely safe. The blood will be analyzed with new equipment and the results of the test will be given to you right after the blood is taken. If your results show that you are mildly or moderately anemic you will be briefed on how to decrease your anemia. If your results show you are severely anemic you need to see your doctor or health center immediately. We will give you a paper with the results that you can take with you and show to the health worker for proper medical attention. We will keep the results confidential.

Do you have any questions? Do you agree to have the test done? **IF YES: CONTINUE WITH HIV CONSENT FORM**

1106	RESULTS: BLOOD TAKEN 1 REFUSED 2 ABSENT 3 TECHNICAL PROBLEM 4 OTHER _____ 6 (SPECIFY)		→ (SKIP TO 1111)
1107	HEMOGLOBIN LEVEL (G/DL): <input type="text"/> <input type="text"/> . <input type="text"/>		
1108	CURRENTLY PREGNANT: YES 1 NO/DON'T KNOW ... 2		
1109	CHECK 1107: THE CUTOFF POINT IS 9 G/DL FOR PREGNANT WOMEN AND 7 G/DL FOR WOMEN WHO ARE NOT PREGNANT (OR WHO DON'T KNOW IF THEY ARE PREGNANT). HEMOGLOBIN LEVEL BELOW THE CUTOFF POINT <input type="checkbox"/> GIVE EACH WOMAN/PARENT/RESPONSIBLE ADULT RESULT OF HEMOGLOBIN MEASUREMENT AND CONTINUE WITH 1110. HEMOGLOBIN LEVEL NORMAL <input type="checkbox"/> GIVE EACH WOMAN/PARENT/RESPONSIBLE ADULT RESULT OF HEMOGLOBIN MEASUREMENT		
1110	We detected a low level of hemoglobin in your blood. This indicates that you have developed severe anemia, which is a serious health problem. We would like to inform the doctor at _____ about your condition. This will assist you in obtaining appropriate treatment for the condition. Do you agree that the information about the level of hemoglobin in your blood may be given to the doctor? AGREES TO REFERRAL? YES 1 NO 2		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
HIV			
1111	CHECK 1102: AGE IS 15-17 <input type="checkbox"/> AGE IS 18-54 <input type="checkbox"/>		→ 1114
1112	LINE NUMBER OF PARENT/ RESPONSIBLE ADULT: <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> (FROM 1103; IF PARENT OR RESPONSIBLE ADULT IS NOT IN HOUSEHOLD, WRITE "00")		
1113	READ THE CONSENT TO THE PARENT OR RESPONSIBLE ADULT CIRCLE CODE AND SIGN	CONSENT _____ ... 1 (SIGN) REFUSED 2 NOT READ 8	→ 1115
1114	READ THE CONSENT TO THE WOMAN OR ADOLESCENT CIRCLE CODE AND SIGN	CONSENT _____ ... 1 (SIGN) REFUSED 2 NOT READ 8	→ 1115
1115	RESULTS: BLOOD TAKEN 1 REFUSED 2 ABSENT 3 TECHNICAL PROBLEM 4 OTHER _____ 6 (SPECIFY)	PASTE FIRST LABEL HERE PASTE SECOND LABEL ON FILTER PAPER AND THE THIRD LABEL ON BLOOD SAMPLE TRANSMITTAL FORM	

REQUEST FOR CONSENT FOR HIV TEST

We would also like to ask you to participate in the HIV test at the same time, by allowing us to collect a few more drops of blood from your finger. As part of the survey, we are asking people all over the country to help find out how big the AIDS problem is in Malawi.

This blood will be tested later in the laboratory. To ensure the confidentiality of this test result, no individual names will be attached to the blood sample; therefore, we will not be able to give you the result of your test and no one will be able to trace the test back to you.

However, if you want to know whether you have HIV, I can tell you where you can go to get tested. You can go to a Voluntary Counselling and Testing (VCT) Centre where you will receive free counseling and confirmed HIV test results that same day. We will provide you with a voucher for yourself, and a voucher for your partner, which either of you can use at the VCT Centre in the next 30 days. With the voucher, there will be no charge for the service, and you will be reimbursed for your travel costs upon receiving the VCT services, and you will meet trained staff available to discuss with you all issues and matters regarding HIV/AIDS. They will provide you with an HIV test and appropriate counseling.

Do you have any questions?

I hope you will agree to participate in the HIV testing. You can say yes or you can say no; it is up to you. However, if you agree, it will help the government to develop programs to fight the problem of HIV/AIDS in Malawi.

Will you agree to participate in the HIV test?

GO TO 1114, CIRCLE THE APPROPRIATE CODE (AND SIGN).

IF RESPONDENT IS AGE 15-17:

ASK PARENT/GUARDIAN: Will you tell me if you will allow (NAME OF YOUTH) to participate in the HIV test? GO TO COLUMN 1113, CIRCLE THE APPROPRIATE CODE (AND SIGN).

IF PARENT/GUARDIAN AGREES, READ THE PRECEDING PARAGRAPHS TO YOUTH FOR HIS/HER CONSENT. GO TO COLUMN 1114, CIRCLE THE APPROPRIATE CODE (AND SIGN).

* DON'T FORGET TO GIVE EACH ELIGIBLE PERSON TWO REFERRAL VOUCHERS FOR FREE HIV TESTS/TRAVEL EXPENSES TO VCT SITE

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF THE SUPERVISOR: _____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR: _____ DATE: _____

MALAWI DEMOGRAPHIC AND HEALTH SURVEY
MALAWI GOVERNMENT - NATIONAL STATISTICAL OFFICE
MEN'S QUESTIONNAIRE

IDENTIFICATION															
PLACE NAME _____	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>														
NAME OF HOUSEHOLD HEAD _____															
DISTRICT															
CLUSTER NUMBER															
HOUSEHOLD NUMBER															
URBAN/RURAL (URBAN=1, RURAL=2)															
LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE (LARGE CITY=1, SMALL CITY=2, TOWN=3, COUNTRYSIDE=4)															
NAME AND LINE NUMBER OF MAN _____															

INTERVIEWER VISITS													
	1	2	3	FINAL VISIT									
DATE	_____	_____	_____	DAY <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>									
INTERVIEWER'S NAME	_____	_____	_____	MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>									
RESULT*	_____	_____	_____	YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>									
NEXT VISIT: DATE	_____	_____		INT. CODE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>									
TIME	_____	_____		RESULT <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>									
				TOTAL NUMBER OF VISITS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td></tr></table>									
<p>*RESULT CODES:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">1 COMPLETED</td> <td style="width: 33%;">4 REFUSED</td> <td style="width: 33%;"></td> </tr> <tr> <td>2 NOT AT HOME</td> <td>5 PARTLY COMPLETED</td> <td>7 OTHER _____</td> </tr> <tr> <td>3 POSTPONED</td> <td>6 INCAPACITATED</td> <td style="text-align: right;">(SPECIFY)</td> </tr> </table>					1 COMPLETED	4 REFUSED		2 NOT AT HOME	5 PARTLY COMPLETED	7 OTHER _____	3 POSTPONED	6 INCAPACITATED	(SPECIFY)
1 COMPLETED	4 REFUSED												
2 NOT AT HOME	5 PARTLY COMPLETED	7 OTHER _____											
3 POSTPONED	6 INCAPACITATED	(SPECIFY)											

LANGUAGE OF QUESTIONNAIRE***: <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px; text-align: center;">3</td></tr></table>	3	NATIVE LANGUAGE OF RESPONDENT***: <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td></tr></table>	
3			
LANGUAGE OF INTERVIEW***: <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td></tr></table>		WAS A TRANSLATOR USED? (YES=1, NO=2) <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td></tr></table>	
*** LANGUAGE CODES: 1 CHICHEWA 2 TUMBUKA 3 ENGLISH 4 OTHER _____ (SPECIFY)			

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY								
NAME _____ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>			NAME _____ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>			<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>			<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>		
DATE _____ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>			DATE _____ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>			<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>			<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>		

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____ and I am working with the National Statistical Office. The National Statistical Office, together with the Ministry of Health, is conducting a national survey about the health of women and children. Your household is one that has been randomly selected out of all households in Malawi to be asked the questions in this survey. We would very much appreciate your participation in this survey.

I would like to ask you some questions related to health. This information will help the government to plan health services. The survey usually takes about 30 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
May I begin the interview now?

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE INTERVIEWED ... 1 RESPONDENT DOES NOT AGREE TO BE INTERVIEWED ... 2 → END

↓

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR <input type="text"/> <input type="text"/> MINUTES <input type="text"/> <input type="text"/>	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a city, in a town, or in the countryside?	CITY 1 TOWN 2 COUNTRYSIDE 3	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS <input type="text"/> <input type="text"/> ALWAYS 95 VISITOR 96	→ 105
104	Just before you moved here, did you live in a city, in a town, or in the countryside?	CITY 1 TOWN 2 COUNTRYSIDE 3	
105	In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away?	NUMBER OF TRIPS AWAY <input type="text"/> <input type="text"/> NONE 00	→ 107
106	In the last 12 months, have you been away from your home community for more than 1 month at a time?	YES 1 NO 2	
107	In what month and year were you born?	MONTH <input type="text"/> <input type="text"/> DON'T KNOW MONTH 98 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR 9998	
108	How old were you at your last birthday? COMPARE AND CORRECT 107 AND/OR 108 IF INCONSISTENT.	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
109	Have you ever attended school?	YES 1 NO 2	→ 113

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
110	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY 1 SECONDARY 2 HIGHER 3	
111	What is the highest (class/form/year) you completed at that level?	CLASS <input type="text"/> <input type="text"/>	
112	CHECK 110: <div style="display: flex; justify-content: space-around; align-items: center;"> PRIMARY <input type="checkbox"/> SECONDARY OR HIGHER <input type="checkbox"/> </div> <p style="text-align: right; margin-top: 10px;">→ 116</p>		
113	Now I would like you to read this sentence to me. SHOW SENTENCES BELOW TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL 1 ABLE TO READ ONLY PARTS OF SENTENCE 2 ABLE TO READ WHOLE SENTENCE 3 NO CARD WITH REQUIRED LANGUAGE 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	

SENTENCES FOR LITERACY TEST (Q 113)

CHICHEWA

**Makolo amakonda ana awo.
Ulimi ndi khama.
Mwana akuwerenga bukhu.
Ana amalimbikila kusukulu.**

TUMBUKA

**Bapapi wakutemwa wana wawo.
Kulima ndi ntchito yinonono.
Mwana wakuwerenga bukhu.
Wana wakulimbikira kusukulu.**

ENGLISH

**Parents love their children.
Farming is hard work.
The child is reading a book.
Children work hard at school.**

YAO

**Anangolo akusyanonyela wanachewawo.
Kulima kukusoseka kulimbichila
Mwanache akuwalanga buku.
Wanache akusyalimbichila sukulu.**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
114	Have you ever participated in a literacy program or any other program that involves learning to read or write (not including primary school)?	YES 1 NO 2	
115	CHECK 113: CODE '2', '3' <input type="checkbox"/> OR '4' <input type="checkbox"/> CIRCLED ↓ CODE '1' OR '5' <input type="checkbox"/> CIRCLED →		117
116	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY 1 AT LEAST ONCE A WEEK 2 LESS THAN ONCE A WEEK 3 NOT AT ALL 4	
117	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY 1 AT LEAST ONCE A WEEK 2 LESS THAN ONCE A WEEK 3 NOT AT ALL 4	
118	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY 1 AT LEAST ONCE A WEEK 2 LESS THAN ONCE A WEEK 3 NOT AT ALL 4	
119	Are you currently working?	YES 1 NO 2	→ 122
120	Have you done any work in the last 12 months?	YES 1 NO 2	→ 122
121	What have you been doing for most of the time over the last 12 months?	GOING TO SCHOOL/STUDYING 1 LOOKING FOR WORK 2 RETIRED 3 UNABLE TO WORK, ILL/ HANDICAPPED 4 HOUSEWORK/CHILDCARE 5 OTHER 6 (SPECIFY)	→ 129
122	What is your occupation, that is, what kind of work do you mainly do?	_____ _____ _____ <input type="checkbox"/>	
123	CHECK 122: WORKS IN <input type="checkbox"/> AGRICULTURE ↓ DOES NOT WORK <input type="checkbox"/> IN AGRICULTURE →		125
124	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	OWN LAND 1 FAMILY LAND 2 RENTED LAND 3 SOMEONE ELSE'S LAND 4	
125	During the last 12 months, how many months did you work?	NUMBER OF MONTHS <input type="checkbox"/>	
126	Are you paid in cash or kind for this work, or are you not paid at all?	CASH ONLY 1 CASH AND KIND 2 IN KIND ONLY 3 NOT PAID 4	→ 129

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
127	Who mainly decides how the money you earn will be used?	RESPONDENT 1 WIFE/PARTNER 2 RESPONDENT AND WIFE/ PARTNER JOINTLY 3 SOMEONE ELSE 4 RESPONDENT AND SOMEONE ELSE JOINTLY 5	
128	On average, how much of your household's expenditures do your earnings pay for: almost none, less than half, about half, more than half, or all?	ALMOST NONE 1 LESS THAN HALF 2 ABOUT HALF 3 MORE THAN HALF 4 ALL 5 NONE, HIS INCOME IS ALL SAVED 6	
129	What is your religion?	CATHOLIC 01 CCAP 02 ANGLICAN 03 SEVENTH DAY ADVENT./BAPTIST ... 04 OTHER CHRISTIAN 05 MUSLIM 06 NO RELIGION 07 OTHER _____ 96 (SPECIFY)	
130	What is your tribe or ethnic group?	CHEWA 01 TUMBUKA 02 LOMWE 03 TONGA 04 YAO 05 SENA 06 NKONDE 07 NGONI 08 OTHER _____ 96 (SPECIFY)	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
201	Now I would like to ask about any children you have had during your life. I am interested only in the children that are biologically yours. Have you ever fathered any children with any woman?	YES 1 NO 2 DON'T KNOW 8	<input type="checkbox"/> → 206								
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES 1 NO 2	→ 204								
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS AT HOME <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
204	Do you have any sons or daughters you have fathered who are alive but do not live with you?	YES 1 NO 2	→ 206								
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS ELSEWHERE <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES 1 NO 2 DON'T KNOW 8	<input type="checkbox"/> → 208								
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> GIRLS DEAD <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
208	(In addition to the children that you have just told me about), do you have: a) any other living sons or daughters who are biologically your children but who are not legally yours or do not have your last name? b) any other sons or daughters who died who were biologically your children but who were not legally yours or did not have your last name? NO <input type="checkbox"/> → TO BOTH OTHER <input type="checkbox"/> → PROBE AND CORRECT 201-207 AS NECESSARY.										
209	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN <table border="1"><tr><td> </td><td> </td></tr></table>									
210	CHECK 209: HAS HAD MORE THAN ONE CHILD <input type="checkbox"/> → HAS HAD ONLY ONE CHILD <input type="checkbox"/> → HAS NOT HAD ANY CHILDREN <input type="checkbox"/> →		→ 213 → 301								
211	Do the children that you have fathered all have the same biological mother?	YES 1 NO 2	→ 213								
212	In all, how many women have you fathered children with?	NUMBER OF WOMEN <table border="1"><tr><td> </td><td> </td></tr></table>									
213	How old were you when your (first) child was born?	AGE IN YEARS <table border="1"><tr><td> </td><td> </td></tr></table>									

SECTION 3. CONTRACEPTION

Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302 IF APPLICABLE.

301	Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?	302 Have you ever used (METHOD)?
01	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	YES 1 NO 2
02	MALE STERILIZATION Men can have an operation to avoid having any more children.	YES 1 NO 2
03	PILL Women can take a pill every day to avoid becoming pregnant.	YES 1 NO 2
04	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	YES 1 NO 2
05	INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES 1 NO 2
06	IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES 1 NO 2
07	CONDOM Men can put a rubber sheath on their penis before sexual intercourse.	YES 1 NO 2
08	FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse.	YES 1 NO 2
12	RHYTHM OR PERIODIC ABSTINENCE Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES 1 NO 2
13	WITHDRAWAL Men can be careful and pull out before climax.	YES 1 NO 2
14	EMERGENCY CONTRACEPTION Women can take pills up to 72 hours after sexual intercourse to avoid becoming pregnant.	YES 1 NO 2
15	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES 1 _____ (SPECIFY) _____ (SPECIFY) NO 2
		Have you ever had an operation to avoid having any more children? YES 1 NO 2
		YES 1 NO 2
		YES 1 NO 2 DONT KNOW 8
		YES 1 NO 2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
303	<p>Now I would like to ask you about a woman's risk of pregnancy.</p> <p>From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	<p>→ 305</p>																
304	<p>Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?</p>	<p>JUST BEFORE HER PERIOD BEGINS 1</p> <p>DURING HER PERIOD 2</p> <p>RIGHT AFTER HER PERIOD HAS ENDE 3</p> <p>HALFWAY BETWEEN TWO PERIODS 4</p> <p>OTHER _____ 6 (SPECIFY)</p> <p>DON'T KNOW 8</p>																	
305	<p>I will now read you some statements about contraception. Please tell me if you agree or disagree with each one.</p> <p>a) Contraception is women's business and a man should not have to worry about it.</p> <p>b) Women who use contraception may become promiscuous.</p> <p>c) A woman is the one who gets pregnant so she should be the one to use contraception.</p>	<table border="0"> <thead> <tr> <th></th> <th>AGREE</th> <th>DISAGREE</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>b)</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>c)</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		AGREE	DISAGREE	DK	a)	1	2	8	b)	1	2	8	c)	1	2	8	
	AGREE	DISAGREE	DK																
a)	1	2	8																
b)	1	2	8																
c)	1	2	8																

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living with a woman?	YES, CURRENTLY MARRIED 1 YES, LIVING WITH A WOMAN 2 NO, NOT IN UNION 3	→ 404 → 406
402	Do you have one wife or more than one wife? IF ONLY ONE WIFE, RECORD '01' . IF MORE THAN ONE, ASK: How many wives do you currently have?	NUMBER OF WIVES <input type="text"/> <input type="text"/>	
403	Are there any other women with whom you live as if married?	YES 1 NO 2	→ 405
404	Are you living with one (other) woman or more than one (other) woman as if married? IF ONLY ONE LIVE-IN PARTNER, RECORD '01'. IF MORE THAN ONE, ASK: How many women are you living with as if married?	NUMBER OF LIVE-IN PARTNERS <input type="text"/> <input type="text"/>	
405	Apart from the woman/women you have already mentioned, do you currently have any other regular or occasional sexual partners?	REGULAR PARTNER(S) ONLY 1 OCCASIONAL PARTNER(S) ONLY 2 REGULAR AND OCCASIONAL PARTNERS 3 NO SEXUAL PARTNER 4	→ 409
406	Do you currently have any regular sexual partners, occasional sexual partners, or do you have no sexual partner at all?	REGULAR PARTNER(S) ONLY 1 OCCASIONAL PARTNER(S) ONLY 2 REGULAR AND OCCASIONAL PARTNERS 3 NO SEXUAL PARTNER 4	
407	Have you ever been married or lived with a woman?	YES, FORMERLY MARRIED ONLY 1 YES, LIVED WITH A WOMAN ONLY 2 YES, BOTH 3 NO 4	→ 411 → 416
408	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED 1 DIVORCED 2 SEPARATED 3	→ 411

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																		
409	WRITE THE LINE NUMBERS FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE/PARTNER REPORTED IN QUESTIONS 402 AND 404 ONLY. IF A WIFE/PARTNER IS NOT LISTED IN THE HOUSEHOLD SCHEDULE, RECORD '00' IN THE LINE NUMBER BOXES. THE NUMBER OF LINES FILLED IN MUST BE EQUAL TO THE NUMBER OF WIVES AND PARTNERS. (IF RESPONDENT HAS MORE THAN FIVE WIVES/PARTNERS USE ADDITIONAL QUESTIONNAIRE(S).)																				
410	<p>CHECK: 402 AND 404</p> <p>SUM OF 402 AND 404 = 1 <input type="checkbox"/></p> <p>Sum of 402 and 404 = 1 <input type="checkbox"/></p> <p>Please tell me the name of your wife/partner.</p> <p>WIFE/PARTNER NUMBER</p> <p>1 _____</p> <p>2 _____</p> <p>3 _____</p> <p>4 _____</p> <p>5 _____</p> <p>SUM OF 402 AND 404 > 1 <input type="checkbox"/></p> <p>Please tell me the name of each (wife/partner that you live with as if married), starting with the one you lived with first.</p>	<table border="1"> <thead> <tr> <th>LINE NUMBER IN HHD. QUEST.</th> <th>WIFE</th> <th>PARTNER</th> </tr> </thead> <tbody> <tr> <td><input type="text"/></td> <td>1</td> <td>2</td> </tr> <tr> <td><input type="text"/></td> <td>1</td> <td>2</td> </tr> <tr> <td><input type="text"/></td> <td>1</td> <td>2</td> </tr> <tr> <td><input type="text"/></td> <td>1</td> <td>2</td> </tr> <tr> <td><input type="text"/></td> <td>1</td> <td>2</td> </tr> </tbody> </table>	LINE NUMBER IN HHD. QUEST.	WIFE	PARTNER	<input type="text"/>	1	2	<input type="text"/>	1	2	<input type="text"/>	1	2	<input type="text"/>	1	2	<input type="text"/>	1	2	
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410A	<p>CHECK 410:</p> <p>ONLY ONE WIFE/PARTNER <input type="checkbox"/></p> <p>MORE THAN ONE WIFE/PARTNER <input type="checkbox"/></p>		→ 412																		
411	Have you been married or lived with a woman only once or more than once?	<p>ONCE 1</p> <p>MORE THAN ONCE 2</p>	→ 414 → 413																		
412	Have you ever been married to or lived as if married to any woman other than those you have just mentioned?	<p>YES 1</p> <p>NO 2</p>	→ 414																		
413	In total, how many women have you been married to or lived with as if married in your whole life?	NUMBER OF WOMEN <input type="text"/>																			
414	<p>CHECK 409 AND 411:</p> <p>ONLY ONE WIFE/PARTNER AND 411=1 <input type="checkbox"/></p> <p>OTHER <input type="checkbox"/></p> <p>In what month and year did you start living with your wife/partner?</p> <p>Now we will talk about your first wife/partner. In what month and year did you start living with her?</p>	<p>MONTH <input type="text"/></p> <p>DON'T KNOW MONTH 98</p> <p>YEAR <input type="text"/></p> <p>DON'T KNOW YEAR 9998</p>	→ 416																		
415	How old were you when you started living with her?	AGE <input type="text"/>																			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
416	<p>Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues.</p> <p>How old were you when you first had sexual intercourse with a woman (if ever)?</p>	<p>NEVER 00</p> <p>AGE IN YEARS <input type="text"/><input type="text"/></p> <p>FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNER ... 95</p>	→ 448
416A	<p>CHECK 108:</p> <p>15-24 YEARS OLD <input type="checkbox"/> 25-54 YEARS OLD <input type="checkbox"/></p>		→ 417
416B	The first time you had sexual intercourse, was a condom used?	<p>YES 1</p> <p>NO 2</p>	
417	<p>When was the last time you had sexual intercourse with a woman?</p> <p>RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO. IF 12 MONTHS OR MORE, ANSWER MUST BE RECORDED IN YEARS.</p>	<p>DAYS AGO 1 <input type="text"/><input type="text"/></p> <p>WEEKS AGO 2 <input type="text"/><input type="text"/></p> <p>MONTHS AGO 3 <input type="text"/><input type="text"/></p> <p>YEARS AGO 4 <input type="text"/><input type="text"/></p>	→ 445
418	The last time you had sexual intercourse with a woman, was a condom used?	<p>YES 1</p> <p>NO 2</p>	→ 420
419	What was the main reason you used a condom on that occasion?	<p>RESPONDENT WANTED TO PREVENT STD/HIV 01</p> <p>RESPONDENT WANTED TO PREVENT PREGNANCY 02</p> <p>RESPONDENT WANTED TO PREVENT BOTH STD/HIV AND PREGNANCY 03</p> <p>DID NOT TRUST PARTNER/FELT PARTNER HAD OTHER PARTNERS 04</p> <p>PARTNER REQUESTED/INSISTED 5</p> <p>OTHER 96 (SPECIFY)</p> <p>DON'T KNOW 98</p>	
420	<p>CHECK 302(02):</p> <p>RESPONDENT NOT STERILIZED <input type="checkbox"/> RESPONDENT STERILIZED <input type="checkbox"/></p>		→ 424
421	<p>CHECK 419:</p> <p>CONDOM USED TO PREVENT PREGNANCY (CODE '02' OR '03') <input type="checkbox"/> OTHER <input type="checkbox"/></p> <p>The last time you had sexual intercourse with a woman, did you or she do something else or use any other method besides a condom to avoid a pregnancy?</p> <p>The last time you had sexual intercourse with a woman, did you or she do something or use any method to avoid a pregnancy?</p>	<p>YES 1</p> <p>NO 2</p> <p>UNSURE/DON'T KNOW 8</p>	→ 424 → 424

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
422	<p>What method was used?</p> <p>IF MORE THAN ONE METHOD USED, RECORD THE HIGHEST METHOD ON THE LIST.</p>	<p>FEMALE STERILIZATION 01</p> <p>PILL 03</p> <p>IUD 04</p> <p>INJECTABLES 05</p> <p>IMPLANTS 06</p> <p>FEMALE CONDOM 08</p> <p>LACTATIONAL AMENORRHEA 11</p> <p>PERIODIC ABSTINENCE 12</p> <p>WITHDRAWAL 13</p> <p>OTHER _____ 96 (SPECIFY)</p> <p>DON'T KNOW 98</p>	
424	<p>What is your relationship to the woman with whom you last had sex?</p> <p>IF WOMAN IS "GIRLFRIEND" OR "FIANCÉE", ASK:</p> <p>Was your girlfriend/fiancée living with you when you last had sex with her?</p> <p>IF YES, CIRCLE '01'. IF NO, CIRCLE '02'.</p>	<p>SPOUSE/COHABITING PARTNER ... 01</p> <p>WOMAN IS GIRLFRIEND/FIANCÉE ... 02</p> <p>OTHER FRIEND 03</p> <p>CASUAL ACQUAINTANCE 04</p> <p>RELATIVE 05</p> <p>WOMAN IS COMMERCIAL SEX WORKER 06</p> <p>OTHER _____ 96 (SPECIFY)</p>	→ 426
425	<p>For how long (have you had/did you have) sexual relations with this woman?</p> <p>IF ONLY HAD SEXUAL RELATIONS WITH THIS WOMAN ONCE, RECORD '01' DAYS.</p>	<p>DAYS 1 <input type="text"/> <input type="text"/></p> <p>WEEKS 2 <input type="text"/> <input type="text"/></p> <p>MONTHS 3 <input type="text"/> <input type="text"/></p> <p>YEARS 4 <input type="text"/> <input type="text"/></p>	
426	<p>Have you had sex with any other woman in the last 12 months?</p>	<p>YES 1</p> <p>NO 2</p>	→ 445
427	<p>The last time you had sexual intercourse with another woman, was a condom used?</p>	<p>YES 1</p> <p>NO 2</p>	→ 430
428	<p>What was the main reason you used a condom on that occasion?</p>	<p>RESPONDENT WANTED TO PREVENT STD/HIV 01</p> <p>RESPONDENT WANTED TO PREVENT PREGNANCY 02</p> <p>RESPONDENT WANTED TO PREVENT BOTH STD/HIV AND PREGNANCY 03</p> <p>DID NOT TRUST PARTNER/ FELT PARTNER HAD OTHER PARTNERS 04</p> <p>PARTNER REQUESTED/INSISTED 05</p> <p>OTHER _____ 96 (SPECIFY)</p> <p>DON'T KNOW 98</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
430	<p>CHECK 428:</p> <p>CONDOM USED TO PREVENT PREGNANCY (CODE '02' OR '03') <input type="checkbox"/></p> <p>OTHER <input type="checkbox"/></p> <p>The last time you had sexual intercourse with this woman, did you or she do something else or use any other method besides a condom to avoid a pregnancy?</p> <p>The last time you had sexual intercourse with this woman, did you or she do something or use any method to avoid a pregnancy?</p>	<p>YES 1</p> <p>NO 2</p> <p>UNSURE/DON'T KNOW 8</p>	<p>→ 433</p> <p>→ 433</p>
431	<p>What method was used?</p> <p>IF MORE THAN ONE METHOD USED, RECORD THE HIGHEST METHOD ON THE LIST.</p>	<p>FEMALE STERILIZATION 01</p> <p>PILL 03</p> <p>IUD 04</p> <p>INJECTABLES 05</p> <p>IMPLANTS 06</p> <p>FEMALE CONDOM 08</p> <p>PERIODIC ABSTINENCE 12</p> <p>WITHDRAWAL 13</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p> <p>DON'T KNOW 98</p>	
433	<p>What is your relationship to this woman?</p> <p>IF WOMAN IS "GIRLFRIEND" OR "FIANCÉE", ASK:</p> <p>Was your girlfriend/fiancée living with you when you last had sex with her?</p> <p>IF YES, CIRCLE '01'. IF NO, CIRCLE '02'.</p>	<p>SPOUSE/COHABITING PARTNER ... 01</p> <p>WOMAN IS GIRLFRIEND/FIANCÉE ... 02</p> <p>OTHER FRIEND 03</p> <p>CASUAL ACQUAINTANCE 04</p> <p>RELATIVE 05</p> <p>WOMAN IS COMMERCIAL SEX WORKER 06</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p>	<p>→ 435</p>
434	<p>For how long (have you had/did you have) sexual relations with this woman?</p> <p>IF ONLY HAD SEXUAL RELATIONS WITH THIS WOMAN ONCE, RECORD '01' DAYS.</p>	<p>DAYS 1 <input type="text"/></p> <p>WEEKS 2 <input type="text"/></p> <p>MONTHS 3 <input type="text"/></p> <p>YEARS 4 <input type="text"/></p>	
435	<p>Other than these two women, have you had sex with any other woman in the last 12 months?</p>	<p>YES 1</p> <p>NO 2</p>	<p>→ 445</p>
436	<p>The last time you had sexual intercourse with this third woman, was a condom used?</p>	<p>YES 1</p> <p>NO 2</p>	<p>→ 438</p>

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
437	What was the main reason you used a condom on that occasion?	RESPONDENT WANTED TO PREVENT STD/HIV 01 RESPONDENT WANTED TO PREVENT PREGNANCY 02 RESPONDENT WANTED TO PREVENT BOTH STD/HIV AND PREGNANCY 03 DID NOT TRUST PARTNER/FELT PARTNER HAD OTHER PARTNERS 04 PARTNER REQUESTED/INSISTED 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
438	CHECK 302(02): RESPONDENT NOT STERILIZED <input type="checkbox"/> RESPONDENT STERILIZED <input type="checkbox"/>		→ 442
439	CHECK 437: CONDOM USED TO PREVENT PREGNANCY (CODE '02' OR '03') <input type="checkbox"/> OTHER <input type="checkbox"/> The last time you had sexual intercourse with this third woman, did you or she do something else or use any other method besides a condom to avoid a pregnancy? The last time you had sexual intercourse with this third woman, did you or she do something or use any method to avoid a pregnancy?	YES 1 NO 2 UNSURE/DON'T KNOW 8	→ 442 → 442
440	What method was used? IF MORE THAN ONE METHOD USED, RECORD THE HIGHEST METHOD ON THE LIST.	FEMALE STERILIZATION 01 PILL 03 IUD 04 INJECTABLES 05 IMPLANTS 06 FEMALE CONDOM 08 PERIODIC ABSTINENCE 12 WITHDRAWAL 13 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
442	What is your relationship to this woman? IF WOMAN IS "GIRLFRIEND" OR "FIANCÉE", ASK: Was your girlfriend/fiancée living with you when you last had sex with her? IF YES, CIRCLE '01' IF NO, CIRCLE '02'	SPOUSE/COHABITING PARTNER ... 01 WOMAN IS GIRLFRIEND/FIANCÉE ... 02 OTHER FRIEND 03 CASUAL ACQUAINTANCE 04 RELATIVE 05 WOMAN IS COMMERCIAL SEX WORKER 06 OTHER _____ 96 (SPECIFY)	→ 444

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
443	<p>For how long (have you had/did you have) sexual relations with this woman?</p> <p>IF ONLY HAD SEXUAL RELATIONS WITH THIS WOMAN ONCE, RECORD '01' DAYS.</p>	<p>DAYS 1 <input type="text"/> <input type="text"/></p> <p>WEEKS 2 <input type="text"/> <input type="text"/></p> <p>MONTHS 3 <input type="text"/> <input type="text"/></p> <p>YEARS 4 <input type="text"/> <input type="text"/></p>	
444	<p>In total, with how many different women have you had sex in the last 12 months?</p>	<p>NUMBER OF PARTNERS ... <input type="text"/> <input type="text"/></p>	
445	<p>Have you ever paid for sex?</p>	<p>YES 1</p> <p>NO 2</p>	→ 448
446	<p>How long ago was the last time you paid for sex?</p>	<p>DAYS AGO <input type="text"/> <input type="text"/></p> <p>WEEKS AGO <input type="text"/> <input type="text"/></p> <p>MONTHS AGO <input type="text"/> <input type="text"/></p> <p>YEARS AGO <input type="text"/> <input type="text"/></p>	
447	<p>The last time that you paid for sex, was a condom used on that occasion?</p>	<p>YES 1</p> <p>NO 2</p>	
448	<p>Do you know of a place where a person can get condoms?</p>	<p>YES 1</p> <p>NO 2</p>	→ 451
449	<p>Where is that?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p> <p>PROBE: Any other place?</p> <p>RECORD ALL PLACES MENTIONED.</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL A</p> <p>GOVERNMENT HEALTH CENTER . B</p> <p>FAMILY PLANNING CLINIC C</p> <p>MOBILE CLINIC D</p> <p>FIELD WORKER E</p> <p>OTHER PUBLIC _____ F</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC G</p> <p>PHARMACY H</p> <p>PRIVATE DOCTOR I</p> <p>MOBILE CLINIC J</p> <p>FIELD WORKER K</p> <p>OTHER PRIVATE</p> <p>MEDICAL _____ L</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP M</p> <p>FRIENDS/RELATIVES O</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	
450	<p>If you wanted to, could you yourself get a condom?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW/UNSURE 8</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																												
451	<p>CHECK 302(07), 416B, 418, 427, 436, AND 447: USE OF CONDOMS</p> <p>AT LEAST ONE 'YES' <input type="checkbox"/> OTHER <input type="checkbox"/></p>		→455																												
452	How old were you when you used a condom for the first time?	<p>AGE AT FIRST USE <input type="text"/> <input type="text"/></p> <p>DOES NOT REMEMBER 98</p>																													
453	<p>Why did you use a condom that first time?</p> <p>PROBE: Any other reason?</p> <p>RECORD ALL REASONS MENTIONED.</p>	<p>TO AVOID PREGNANCY A</p> <p>TO AVOID GETTING AIDS/HIV B</p> <p>TO AVOID GETTING AN STI C</p> <p>TO AVOID INFECTING PARTNER ... D</p> <p>TO EXPERIMENT/TRY A CONDOM ... E</p> <p>OTHER _____ X (SPECIFY)</p>																													
454	<p>Have you ever experienced any problems with using condoms?</p> <p>IF YES: What problems have you experienced?</p> <p>PROBE: Any other problems?</p> <p>RECORD ALL PROBLEMS MENTIONED.</p>	<p>DIFFICULT TO DISPOSE OF A</p> <p>DIFFICULT TO PUT ON/TAKE OFF ... B</p> <p>SPOILS THE MOOD C</p> <p>DIMINISHES PLEASURE D</p> <p>WIFE PARTNER OBJECTS/ DOES NOT LIKE E</p> <p>WIFE/PARTNER GOT PREGNANT ... F</p> <p>INCONVENIENT TO USE/MESSY ... G</p> <p>CONDOM BROKE H</p> <p>OTHER _____ X (SPECIFY)</p> <p>NO PROBLEM Y</p>																													
455	Have you heard of a condom called "Chishango"?	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>																													
456	<p>I will now read you some statements about condom use. Please tell me if you agree or disagree with each.</p> <p>a) Condoms diminish a man's sexual pleasure.</p> <p>b) A condom is very inconvenient to use.</p> <p>c) A condom can be reused.</p> <p>d) A condom protects against AIDS or STIs.</p> <p>e) Buying condoms is embarrassing.</p> <p>f) A woman has no right to ask a man to use a condom.</p>	<table border="0"> <thead> <tr> <th></th> <th>AGREE</th> <th>DISAGREE</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>b)</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>c)</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>d)</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>e)</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>f)</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		AGREE	DISAGREE	DK	a)	1	2	8	b)	1	2	8	c)	1	2	8	d)	1	2	8	e)	1	2	8	f)	1	2	8	
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SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	<p>CHECK 410:</p> <p>HAS ONE WIFE/ PARTNER <input type="checkbox"/></p> <p>HAS MORE THAN ONE WIFE/ PARTNER <input type="checkbox"/></p>	<p>QUESTION SKIPPED <input type="checkbox"/></p>	→ 505
502	<p>(Is your wife/partner/Are any of your wives/partners) currently pregnant?</p>	<p>YES 1 NO 2 UNSURE 3</p>	
503	<p>CHECK 502:</p> <p>YES, WIFE/WIVES/ PREGNANT <input type="checkbox"/></p> <p>NO WIFE/PARTNER PREGNANT OR UNSURE <input type="checkbox"/></p> <p>Now I have some questions about the future. After the child(ren) your wife/wives/partner(s) is/are expecting now, would you like to have another child or would you prefer not to have any more children at all?</p>	<p>HAVE A/ANOTHER CHILD 1 NO MORE/NONE 2 WIFE/WIVES INFECUND/ STERILIZED 3 UNDECIDED/DON'T KNOW 8</p>	→ 505
504	<p>How long would you like to wait from now before the birth of (a/another) child ?</p>	<p>MONTHS 1 <input type="text"/><input type="text"/></p> <p>YEARS 2 <input type="text"/><input type="text"/></p> <p>SOON/NOW 993</p> <p>AFTER MARRIAGE 995</p> <p>OTHER _____ 996 (SPECIFY)</p> <p>DON'T KNOW 998</p>	
505	<p>CHECK 203 AND 205:</p> <p>HAS LIVING CHILDREN <input type="checkbox"/></p> <p>NO LIVING CHILDREN <input type="checkbox"/></p> <p>If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?</p>	<p>NONE 00</p> <p>NUMBER <input type="text"/><input type="text"/></p> <p>OTHER _____ 96 (SPECIFY)</p>	→ 507 → 507
506	<p>How many of these children would you like to be boys, how many would you like to be girls, and for how many would the sex not matter?</p>	<p>BOYS GIRLS EITHER</p> <p>NUM- BER <input type="text"/><input type="text"/> <input type="text"/><input type="text"/> <input type="text"/><input type="text"/></p> <p>OTHER _____ (SPECIFY)</p>	
507	<p>Would you say that you approve or disapprove of couples using a contraceptive method to avoid getting pregnant?</p>	<p>APPROVE 1 DISAPPROVE 2 DON'T KNOW/UNSURE 8</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																										
508	In the last few months have you heard about family planning: On the radio? On the television? In a newspaper or magazine? On a poster? On clothing (i.e., cap, chitenji, t-shirt)? In a drama? Somewhere else? (SPECIFY)	<table style="width: 100%; border: none;"> <tr> <td></td> <td style="text-align: right;">YES</td> <td style="text-align: right;">NO</td> </tr> <tr> <td>RADIO</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>TELEVISION</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>NEWSPAPER OR MAGAZINE</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>POSTER</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>CLOTHING</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>DRAMA</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>OTHER _____(SPECIFY) ..</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> </table>		YES	NO	RADIO	1	2	TELEVISION	1	2	NEWSPAPER OR MAGAZINE	1	2	POSTER	1	2	CLOTHING	1	2	DRAMA	1	2	OTHER _____(SPECIFY) ..	1	2																			
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OTHER _____(SPECIFY) ..	1	2																																											
509	In the last few months, have you listened to any of the following program series about family planning or health on the radio? Uchembere Wabwino? Phukusi la Moyo? Pa Mtondo? Women's Talking Point? Window Through Health? Umoyo M'Malawi? Tikuferanji? Radio Doctor? Chitukuku M'Malawi? Women's Forum? Tichitenji? Kulera? Other? (SPECIFY)	<table style="width: 100%; border: none;"> <tr> <td></td> <td style="text-align: right;">YES</td> <td style="text-align: right;">NO</td> </tr> <tr> <td>UCHEMBERE WABWINO</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>PHUKUSI LA MOYO</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>PA MTONDO</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>WOMEN'S TALKING PT</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>WINDOW THRU HEALTH</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>UMOYO M'MALAWI</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>TIKUFERANJI</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>RADIO DOCTOR</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>CHITUKUKU M'MALAWI</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>WOMEN'S FORUM</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>TICHITENJI</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>KULERA</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>OTHER _____(SPECIFY)</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> </table>		YES	NO	UCHEMBERE WABWINO	1	2	PHUKUSI LA MOYO	1	2	PA MTONDO	1	2	WOMEN'S TALKING PT	1	2	WINDOW THRU HEALTH	1	2	UMOYO M'MALAWI	1	2	TIKUFERANJI	1	2	RADIO DOCTOR	1	2	CHITUKUKU M'MALAWI	1	2	WOMEN'S FORUM	1	2	TICHITENJI	1	2	KULERA	1	2	OTHER _____(SPECIFY)	1	2	
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510	In the last few months, have you discussed the practice of family planning with your friends, neighbors, or relatives?	<table style="width: 100%; border: none;"> <tr> <td>YES</td> <td style="text-align: right;">1</td> </tr> <tr> <td>NO</td> <td style="text-align: right;">2</td> </tr> </table>	YES	1	NO	2	→ 512																																						
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511	With whom? Anyone else? RECORD ALL PERSONS MENTIONED.	<table style="width: 100%; border: none;"> <tr> <td>WIFE(WIVES)/PARTNER(S)</td> <td style="text-align: right;">A</td> </tr> <tr> <td>MOTHER</td> <td style="text-align: right;">B</td> </tr> <tr> <td>FATHER</td> <td style="text-align: right;">C</td> </tr> <tr> <td>SISTER(S)</td> <td style="text-align: right;">D</td> </tr> <tr> <td>BROTHER(S)</td> <td style="text-align: right;">E</td> </tr> <tr> <td>DAUGHTER</td> <td style="text-align: right;">F</td> </tr> <tr> <td>SON</td> <td style="text-align: right;">G</td> </tr> <tr> <td>MOTHER(S)-IN-LAW</td> <td style="text-align: right;">H</td> </tr> <tr> <td>FATHER(S)-IN-LAW</td> <td style="text-align: right;">I</td> </tr> <tr> <td>FRIENDS/NEIGHBORS</td> <td style="text-align: right;">J</td> </tr> <tr> <td>OTHER _____</td> <td style="text-align: right;">X</td> </tr> <tr> <td style="text-align: center;">(SPECIFY)</td> <td></td> </tr> </table>	WIFE(WIVES)/PARTNER(S)	A	MOTHER	B	FATHER	C	SISTER(S)	D	BROTHER(S)	E	DAUGHTER	F	SON	G	MOTHER(S)-IN-LAW	H	FATHER(S)-IN-LAW	I	FRIENDS/NEIGHBORS	J	OTHER _____	X	(SPECIFY)																				
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512	In the last few months, have you discussed the practice of family planning with a health worker or health professional?	<table style="width: 100%; border: none;"> <tr> <td>YES</td> <td style="text-align: right;">1</td> </tr> <tr> <td>NO</td> <td style="text-align: right;">2</td> </tr> </table>	YES	1	NO	2																																							
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SECTION 6. PARTICIPATION IN HEALTH CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	CHECK 209: HAS HAD ONE OR MORE CHILDREN <input type="checkbox"/>	HAS NOT HAD ANY CHILDREN <input type="checkbox"/>	→ 617
602	Please tell me the name and sex of your child (who was born most recently). _____ (NAME OF CHILD)	BOY 1 GIRL 2	
603	In what month and year was (NAME OF CHILD) born?	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
604	Is (NAME OF CHILD) still living?	YES 1 NO 2 DON'T KNOW 8	→ 606 → 606
605	How old was (NAME OF CHILD) when he/she died? IF '1 YEAR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	DAYS 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS 3 <input type="text"/> <input type="text"/> DON'T KNOW 998	
606	CHECK 603: (LAST) CHILD BORN IN 2001 OR LATER <input type="checkbox"/>	(LAST) CHILD BORN IN 2000 OR EARLIER <input type="checkbox"/>	→ 617
607	What is the name of (NAME OF CHILD)'s mother? WRITE THE CHILD'S MOTHER'S NAME AND HER LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF THE MOTHER IS NOT LISTED IN THE HOUSEHOLD SCHEDULE RECORD '00' NAME OF CHILD'S MOTHER _____	LINE NUMBER IN HHD. QUEST <input type="text"/> <input type="text"/>	
608	CHECK 606: LINE NUMBER IS '00' <input type="checkbox"/>	OTHER LINE NUMBER <input type="checkbox"/>	→ 610
609	What is your relationship with (NAME OF CHILD)'s mother?	CURRENT SPOUSE 01 FORMER SPOUSE 02 CURRENT LIVE-IN PARTNER 03 FORMER LIVE-IN PARTNER 04 REGULAR SEXUAL PARTNER 05 WOMAN IS GIRLFRIEND/FIANCÉE ... 06 OCCASIONAL SEXUAL PARTNER ... 07 FRIEND/ACQUAINTANCE 08 OTHER 96 _____ (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
610	ASK QUESTIONS 610A-612 FIRST FOR PREGNANCY, THEN FOR DELIVERY, AND THEN FOR THE SIX WEEKS AFTER DELIVERY. ALL QUESTIONS REFER TO THE LAST BIRTH.				
		PREGNANCY	DELIVERY	SIX WEEKS AFTER DELIVERY	
610A-610C	Now, think back to the time when (NAME OF CHILD'S MOTHER) was pregnant with (NAME OF CHILD).	<p>610A: Did (NAME OF CHILD'S MOTHER) receive any antenatal care from a doctor or any health care provider when she was pregnant with (NAME OF CHILD)?</p> <p>YES 1 NO 2 (SKIP TO 612) ← DK 8 (GO TO 610B IN ← NEXT COLUMN)</p>	<p>610B: Did a doctor or any health care provider assist with the delivery of (NAME OF CHILD)?</p> <p>YES 1 NO 2 (SKIP TO 612) ← DK 8 (GO TO 610C IN ← NEXT COLUMN)</p>	<p>610C: Did (NAME OF CHILD'S MOTHER) receive any care for herself from a doctor or any health care provider during the six weeks after this delivery?</p> <p>YES 1 NO 2 (SKIP TO 612) ← DK 8 (SKIP TO 613) ←</p>	
611	<p>Did you pay for this care?</p> <p>IF YES ASK:</p> <p>Who mainly provided the money or goods or services to pay for this care?</p>	<p>FREE 01 INSURANCE 02 RESPONDENT 03 CHILD'S MOTHER 04 RESPONDENT AND CHILD'S MOTHER 05 RESPONDENT'S FAMILY 06 CHILD'S MOTHER'S FAMILY 07 OTHER 96 (SPECIFY) (GO TO 610B IN ← NEXT COLUMN)</p>	<p>FREE 01 INSURANCE 02 RESPONDENT 03 CHILD'S MOTHER 04 RESPONDENT AND CHILD'S MOTHER 05 RESPONDENT'S FAMILY 06 CHILD'S MOTHER'S FAMILY 07 OTHER 96 (SPECIFY) (GO TO 610C IN ← NEXT COLUMN)</p>	<p>FREE 01 INSURANCE 02 RESPONDENT 03 CHILD'S MOTHER 04 RESPONDENT AND CHILD'S MOTHER 05 RESPONDENT'S FAMILY 06 CHILD'S MOTHER'S FAMILY 07 OTHER 96 (SPECIFY) (SKIP TO 613) ←</p>	
612	What was the main reason (NAME OF CHILD'S MOTHER) did not receive any advice or care from a doctor or other health care provider during (pregnancy/delivery/the six weeks after delivery)?	<p>NOT NECESSARY 01 NOT CUSTOMARY 02 RESPONDENT DIDN'T ALLOW 03 TOO COSTLY 04 TOO FAR/NO TRANSPORT 05 POOR SERVICE 06 LACK OF KNOWLEDGE 07 OTHER 96 (SPECIFY) (GO TO 610B IN ← NEXT COLUMN)</p>	<p>NOT NECESSARY 01 NOT CUSTOMARY 02 RESPONDENT DIDN'T ALLOW 03 TOO COSTLY 04 TOO FAR/NO TRANSPORT 05 POOR SERVICE 06 LACK OF KNOWLEDGE 07 OTHER 96 (SPECIFY) (GO TO 610C IN ← NEXT COLUMN)</p>	<p>NOT NECESSARY 01 NOT CUSTOMARY 02 RESPONDENT DIDN'T ALLOW 03 TOO COSTLY 04 TOO FAR/NO TRANSPORT 05 POOR SERVICE 06 LACK OF KNOWLEDGE 07 OTHER 96 (SPECIFY) (SKIP TO 613) ←</p>	
613	At any time while (NAME OF CHILD'S MOTHER) was pregnant with (NAME OF CHILD), did you yourself talk with a doctor or any other health care provider about the health of the mother or of the pregnancy?	<p>YES 1 NO 2</p>			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
614	CHECK 602 AND 604: NAME OF (LAST) CHILD _____ (LAST) CHILD LIVING <input type="checkbox"/> (LAST) CHILD NOT LIVING OR DON'T KNOW <input type="checkbox"/>		→ 617
615	Does (NAME OF CHILD) live with you in your household?	YES 1 NO 2	→ 617
616	In your household who usually decides what to do if (NAME OF CHILD) is ill? RECORD ALL PERSONS MENTIONED.	RESPONDENT A CHILD'S MOTHER B WIFE/PARTNER WHO IS NOT CHILD'S MOTHER C FEMALE RELATIVE D MALE RELATIVE E OTHER _____ X (SPECIFY) CHILD HAS NEVER BEEN ILL Y	
616A	Have you yourself ever taken (NAME OF CHILD) to a health facility for care?	YES 1 NO 2 DON'T KNOW 8	
617	Now, I want to talk to you about pregnancy and the health of children. Sometimes a pregnancy can have complications that lead to miscarriage or even death. What are some of the signs and symptoms that indicate that a pregnancy may be in danger? PROBE: Any other signs or symptoms? RECORD ALL SIGNS AND SYMPTOMS MENTIONED.	VAGINAL BLEEDING A HIGH FEVER B ABDOMINAL PAIN C SWELLING OF HANDS AND FEET ... D DIFFICULT LABOR FOR MORE THAN 12 HOURS E CONVULSIONS F OTHER _____ X (SPECIFY) DON'T KNOW ANY SIGNS OR SYMPTOMS Z	
618	When a child has diarrhea, should he/she be given less to drink than usual, about the same amount, or more than usual?	LESS 1 ABOUT THE SAME 2 MORE 3 DON'T KNOW 4	
619	Have you ever heard of a special product called THANZI you can get for the treatment of diarrhea?	YES 1 NO 2	
620	Now, please tell me about yourself. In the past 12 months, did you receive any injections?	YES 1 NO 2	→ 621
620A	In the past 12 months, how many injections did you receive?	NUMBER <input type="text"/>	
620B	Who gave you the injection the last time you got it?	DOCTOR 1 NURSE 2 PHARMACIST 3 DRUG VENDOR 4 SELF-ADMINISTERED 5 FRIEND OR FAMILY 6 LOCAL INJECTION DOCTOR 7 OTHER _____ 8 SPECIFY	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
621	Do you currently smoke cigarettes or use tobacco? IF YES: What type of tobacco do you use? RECORD ALL TYPES MENTIONED.	YES, CIGARETTES A YES, PIPE B YES, OTHER TOBACCO C YES, CHEWING TOBACCO D YES, SNUFF E NO Y	
622	Do you drink alcohol?	YES 1 NO 2	→ 701
622A	How often do you get drunk: very often, only sometimes, or never?	VERY OFTEN 1 SOMETIMES 2 NEVER 3	

SECTION 7. HIV/AIDS AND OTHER SEXUALLY TRANSMITTED INFECTIONS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES 1 NO 2	→ 724A
702	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES 1 NO 2 DON'T KNOW 8	└→ 709
703	What can a person do? Anything else? RECORD ALL WAYS MENTIONED.	ABSTAIN FROM SEX. A USE CONDOMS B LIMIT SEX TO ONE PARTNER/STAY FAITHFUL TO ONE PARTNER ... C LIMIT NUMBER OF SEXUAL PARTNERS D AVOID SEX WITH PROSTITUTES ... E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS F AVOID SEX WITH HOMOSEXUALS ... G AVOID SEX WITH PERSONS WHO INJECT DRUGS INTRAVENOUSLY . H AVOID BLOOD TRANSFUSIONS I AVOID INJECTIONS J AVOID SHARING RAZORS/BLADES . K AVOID KISSING L AVOID MOSQUITO BITES M SEEK PROTECTION FROM TRADITIONAL PRACTITIONER ... N OTHER _____ W (SPECIFY) OTHER _____ X (SPECIFY) DON'T KNOW Z	
704	Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and has no other partners?	YES 1 NO 2 DON'T KNOW 8	
705	Can a person get the AIDS virus from mosquito bites?	YES 1 NO 2 DON'T KNOW 8	
706	Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex?	YES 1 NO 2 DON'T KNOW 8	
707	Can a person get the AIDS virus by sharing food with a person who has AIDS?	YES 1 NO 2 DON'T KNOW 8	
708	Can people reduce their chance of getting the AIDS virus by not having sex at all?	YES 1 NO 2 DON'T KNOW 8	
708A	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES 1 NO 2 DON'T KNOW 8	
709	Is it possible for a healthy-looking person to have the AIDS virus?	YES 1 NO 2 DON'T KNOW 8	
710	Do you know someone personally who has the virus that causes AIDS or someone who died of AIDS?	YES 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
711	Can the virus that causes AIDS be transmitted from a mother to a child?	YES 1 NO 2 DON'T KNOW 8	<input type="checkbox"/> → 713
712	Can the virus that causes AIDS be transmitted from a mother to her child... During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREGNANCY . 1 2 8 DURING DELIVERY 1 2 8 BY BREASTFEEDING ... 1 2 8	
712A	Are there any drugs that a woman infected with the AIDS virus can take to reduce the risk of transmission to the baby during pregnancy?	YES 1 NO 2 DON'T KNOW 8	
713	CHECK 401: YES, CURRENTLY MARRIED/LIVING WITH A WOMAN <input type="checkbox"/> NO, NOT IN UNION <input type="checkbox"/>		<input type="checkbox"/> → 715
714	Have you ever talked with (your wife/the woman you are living with) about ways to prevent getting the virus that causes AIDS? IF MORE THAN ONE WIFE/PARTNER, ASK ABOUT ANY OF HIS WIVES/PARTNERS.	YES 1 NO 2	
715	In your opinion, is it acceptable or unacceptable for AIDS to be discussed: on the radio? on the TV? in newspapers?	ACCEPT-ABLE NOT ACCEPT-ABLE ON THE RADIO ... 1 2 ON THE TV 1 2 IN NEWSPAPERS . 1 2	
715A	Would you buy fresh vegetables from a vendor who has the AIDS virus?	YES 1 NO 2 DON'T KNOW 8	
716	If a member of your family got infected with the virus that causes AIDS, would you fear disclosing their status?	YES 1 NO 2 DON'T KNOW/UNSURE 8	
717	If a member of your extended family such as a cousin died of AIDS and left orphaned children behind, would you be willing to take those children as part of your family?	YES 1 NO 2 DON'T KNOW/UNSURE/DEPENDS . 8	
718	If a female teacher has the AIDS virus, should she be allowed to continue teaching in the school?	CAN CONTINUE 1 SHOULD NOT CONTINUE 2 DON'T KNOW/UNSURE/DEPENDS ... 8	
718A	Should persons with the AIDS virus who work with other persons such as in a shop, office, or farm be allowed to continue their work or not?	CAN CONTINUE WORK 1 SHOULD NOT CONTINUE WORK ... 2 DK/NOT SURE/DEPENDS 8	
718B	Are people who have AIDS immoral?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
719	Should children age 12-14 years be taught about using a condom to avoid AIDS?	YES 1 NO 2 DON'T KNOW/UNSURE/DEPENDS . 8	
719A	Do you think that condoms are safe to use?	YES 1 NO 2 DK/NOT SURE 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
719B	Do you think that men and women who intend to marry should be tested for the AIDS virus before marriage?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
719C	Have you heard any radio spots or messages with regard to HIV/AIDS in the last 30 days?	YES 1 NO 2	
719D	Have you seen any TV spots or programs with regard to HIV/AIDS in the last 30 days?	YES 1 NO 2	
719E	Have you read articles, messages or advertisements about HIV/AIDS in a magazine or newspaper in the last 30 days?	YES 1 NO 2	
720	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES 1 NO 2	→ 722
720A	When was the last time you were tested?	LESS THAN 12 MONTHS 1 12-23 MONTHS 2 2 YEARS OR MORE 3	
720B	The last time you had the test, did you yourself ask for the test, was it offered to you and you accepted, or was it required?	ASKED FOR THE TEST 1 OFFERED AND ACCEPTED 2 REQUIRED 3	
720C	I don't want to know the results, but did you get the results of the test?	YES 1 NO 2	→ 723A
722	Do you know a place where you could go to get an AIDS test?	YES 1 NO 2	→ 724
723	Where can you go for the test? RECORD ONLY FIRST RESPONSE GIVEN.	PUBLIC SECTOR GOVERNMENT HOSPITAL 11 GOVERNMENT HEALTH CENTER . 12 FAMILY PLANNING CLINIC 13 MOBILE CLINIC 14 FIELD WORKER 15 OTHER PUBLIC _____ 16 (SPECIFY)	
723A	Where did you go for the test? _____ (NAME OF PLACE) IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE	MISSION HOSPITAL 21 HEALTH CENTER 22 MOBILE CLINIC 23 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC 21 PHARMACY 22 PRIVATE DOCTOR 23 MOBILE CLINIC 24 FIELD WORKER 25 OTHER PRIVATE MEDICAL _____ 26 (SPECIFY) BLM 41 MACRO 51 OTHER _____ 96 (SPECIFY)	
724	Do you know the HIV status of any partner with whom you have had sex in the past year?	YES 1 NO 2	
724A	Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact?	YES 1 NO 2	→ 727

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
725	<p>If a man has a sexually transmitted disease, what symptoms might he have?</p> <p>Any others?</p> <p>RECORD ALL SYMPTOMS MENTIONED.</p>	<p>ABDOMINAL PAIN A</p> <p>GENITAL DISCHARGE/DRIPPING ... B</p> <p>FOUL SMELLING DISCHARGE C</p> <p>BURNING PAIN ON URINATION D</p> <p>REDNESS/INFLAMMATION IN GENITAL AREA E</p> <p>SWELLING IN GENITAL AREA F</p> <p>GENITAL SORES/ULCERS G</p> <p>GENITAL WARTS H</p> <p>GENITAL ITCHING I</p> <p>BLOOD IN URINE J</p> <p>LOSS OF WEIGHT K</p> <p>IMPOTENCE L</p> <p>OTHER _____ W (SPECIFY)</p> <p>OTHER _____ X (SPECIFY)</p> <p>NO SYMPTOMS Y</p> <p>DON'T KNOW Z</p>	
726	<p>If a woman has a sexually transmitted disease, what symptoms might she have?</p> <p>Any others?</p> <p>RECORD ALL SYMPTOMS MENTIONED.</p>	<p>ABDOMINAL PAIN A</p> <p>GENITAL DISCHARGE/DRIPPING ... B</p> <p>FOUL SMELLING DISCHARGE C</p> <p>BURNING PAIN ON URINATION D</p> <p>REDNESS/INFLAMMATION IN GENITAL AREA E</p> <p>SWELLING IN GENITAL AREA F</p> <p>GENITAL SORES/ULCERS G</p> <p>GENITAL WARTS H</p> <p>GENITAL ITCHING I</p> <p>BLOOD IN URINE J</p> <p>LOSS OF WEIGHT K</p> <p>HARD TO GET PREGNANT/ HAVE A CHILD L</p> <p>OTHER _____ W (SPECIFY)</p> <p>OTHER _____ X (SPECIFY)</p> <p>NO SYMPTOMS Y</p> <p>DON'T KNOW Z</p>	
727	<p>CHECK 416:</p> <p>HAS HAD SEXUAL INTERCOURSE <input type="checkbox"/></p> <p>HAS NOT HAD SEXUAL INTERCOURSE <input type="checkbox"/></p>		737
727A	<p>CHECK 724:</p> <p>KNOWS STI <input type="checkbox"/></p> <p>DOES NOT KNOW STI <input type="checkbox"/></p>		729
728	<p>Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a sexually-transmitted disease?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	
729	<p>Sometimes, men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	
730	<p>Sometimes men have a sore or ulcer on or near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP															
731	CHECK 728/729/730: <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>HAS HAD AN INFECTION</p> <input type="checkbox"/> </div> <div style="text-align: center;"> <p>HAS NOT HAD AN INFECTION OR DOES NOT KNOW</p> <input type="checkbox"/> </div> </div>		→ 737															
732	The last time you had (PROBLEM(S) FROM 728/729/730), did you seek any kind of advice or treatment?	YES 1 NO 2	→ 734															
733	The last time you had (PROBLEM(S) FROM 728/729/730), did you do any of the following? Did you.... Go to a clinic, hospital or private doctor? Consult a traditional healer? Seek advice or buy medicines in a shop or pharmacy? Ask for advice from friends or relatives?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">YES</th> <th style="text-align: center;">NO</th> </tr> </thead> <tbody> <tr> <td>CLINIC/HOSPITAL</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>TRADITIONAL HEALER .</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>SHOP/PHARMACY</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>FRIENDS/RELATIVES ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		YES	NO	CLINIC/HOSPITAL	1	2	TRADITIONAL HEALER .	1	2	SHOP/PHARMACY	1	2	FRIENDS/RELATIVES ...	1	2	
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734	When you had (PROBLEM(S) FROM 728/729/730), did you inform the person(s) with whom you were having sex?	YES 1 NO 2 SOME/ NOT ALL 3 DID NOT HAVE A PARTNER 4	→ 737															
735	When you had (PROBLEM(S) FROM 728/729/730), did you do anything to avoid infecting your sexual partner(s)?	YES 1 NO 2 PARTNER(S) ALREADY INFECTED .. 8	→ 737															
736	What did you do to avoid infecting your partner(s)? Did you.... Use medicine? Stop having sex? Use a condom when having sex?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">YES</th> <th style="text-align: center;">NO</th> </tr> </thead> <tbody> <tr> <td>USE MEDICINE</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>STOP SEX</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>USE CONDOM</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		YES	NO	USE MEDICINE	1	2	STOP SEX	1	2	USE CONDOM	1	2				
	YES	NO																
USE MEDICINE	1	2																
STOP SEX	1	2																
USE CONDOM	1	2																
737	Some men are circumcised. Are you circumcised?	YES 1 NO 2																

SECTION 9. HIV TESTING

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	CHECK 108: AGE IS 15-17 <input type="checkbox"/> AGE IS 18-54 <input type="checkbox"/>		904
902	LINE NUMBER OF PARENT/ RESPONSIBLE ADULT: <input type="text"/> <input type="text"/> (FROM COLUMN 1 IN HOUSEHOLD SCHEDULE) (IF PARENT OR RESPONSIBLE ADULT IS NOT IN HOUSEHOLD, WRITE "00")		
903	READ THE CONSENT TO THE PARENT OR RESPONSIBLE ADULT CIRCLE CODE AND SIGN	CONSENT _____ 1 (SIGN) REFUSED 2 NOT READ 8	905
904	READ THE CONSENT TO THE MAN OR ADOLESCENT CIRCLE CODE AND SIGN	CONSENT _____ 1 (SIGN) REFUSED 2 NOT READ 8	905
905	RESULTS: BLOOD TAKEN 1 REFUSED 2 ABSENT 3 TECHNICAL PROBLEM 4 OTHER _____ 6 (SPECIFY)	<div style="border: 1px solid black; padding: 5px;"> <p>PASTE FIRST LABEL HERE</p> <p>PASTE SECOND LABEL ON FILTER PAPER AND THE THIRD LABEL ON BLOOD SAMPLE TRANSMITTAL FORM</p> </div>	

REQUEST FOR CONSENT FOR HIV TEST

We would like to ask you to participate in the HIV test by allowing us to collect a few drops of blood from your finger. As part of the survey, we are asking people all over the country to help find out how big the AIDS problem is in Malawi.

The test uses sterile, disposable instruments that are completely clean and safe. This blood will be tested later in the laboratory. To ensure the confidentiality of this test result, no individual names will be attached to the blood sample; therefore, we will not be able to give you the result of your test and no one will be able to trace the test back to you.

However, if you want to know whether you have HIV, I can tell you where you can go to get tested. You can go to a Voluntary Counselling and testing (VCT) Centre where you will receive free counselling and confirmed HIV test results that same day. We will provide you with a voucher for yourself, and a voucher for your partner, which either of you can use at the VCT Centre in the next 30 days. With the voucher, there will be no charge for this service, and you will be reimbursed for your travel costs upon receiving the VCT services. At this centre you will meet trained staff available to discuss with you all issues and matters regarding HIV/AIDS. They will provide you with an HIV test and appropriate counselling.

Do you have any questions?

I hope you will agree to participate in the HIV testing. You can say yes or you can say no; it is up to you. However, if you agree, it will help the government to develop programs to fight the problem of HIV/AIDS in Malawi.

Will you agree to participate in the HIV test?

GO TO 904, CIRCLE THE APPROPRIATE CODE (AND SIGN).

IF RESPONDENT IS AGE 15-17:

ASK APRENT/GUARDIAN: Will you tell me if you will allow (NAME OF YOUTH) to participate in the HIV test? GO TO COLUMN 903, CIRCLE THE APPROPRIATE CODE (AND SIGN).

IF PARENT/GUARDIAN AGREES, READ THE PRECEDING PARAGRAPHS TO YOUTH FOR HIS/HER CONSENT. GO TO COLUMN 904, CIRCLE THE APPROPRIATE CODE (AND SIGN).

*DON'T FORGET TO GIVE EACH ELIGIBLE PERSON TWO REFERRAL VOUCHERS FOR FREE HIV TESTS/TRAVEL EXPENSES TO VCT SITE.

MILLENNIUM DEVELOPMENT GOAL INDICATORS

Appendix *F*

Millennium Development Goal Indicators, Malawi, 2004				
Goal	Indicator	Value		
		Male	Female	Total
1. Eradicate extreme poverty and hunger	Prevalence of underweight children under five years of age (%)	21.8	22.4	22.0
	Net enrolment ratio in primary education (%) ¹	80.1	83.9	82.0
2. Achieve universal primary education	Percent of pupils starting grade 1 who reach grade 5 ¹	85.2	86.5	85.9
	Literacy rate of 15-24-year olds (%) ²	75.7	65.4	67.3
3. Promote gender equality and empower women	Ratio of girls to boys in primary education			0.95
	Ratio of girls to boys in secondary education			0.75
	Ratio of girls to boys in tertiary education			0.88
	Ratio of literate women to men, 15-24 years old			0.86
	Share of women in wage employment in the non-agricultural sector (%) ³			15.4
4. Reduce child mortality	Under-five mortality rate (deaths per 1,000 live births)			133
	Infant mortality rate (deaths per 1,000 live births)			76
	Percent of 1 year-old children immunised against measles	78.8	78.6	78.7
5. Improve maternal health	Maternal Mortality Ratio (deaths per 100,000 live births)			984
	Percent of births attended by skilled health personnel			57.0
6. Combat HIV/AIDS, malaria, and other diseases	Percentage of current users of contraception who are using condoms (currently married women 15-49)			3.2
	Condom use at last high-risk sex (population age 15-49)(%) ⁴	47.1	30.1	37.9
	Percentage of population age 15-24 years with comprehensive correct knowledge of HIV/AIDS ⁵	33.2	24.8	28.3
	Contraceptive prevalence rate (any modern method, currently married women 15-49)(%)			28.1
	Ratio of school attendance of orphans to school attendance of non-orphans age 10-14 years			1.0
7. Ensure environmental sustainability	Percentage of population using solid fuels ⁶	Urban	Rural	Total
		88.7	99.7	97.9
	Percentage of population with sustainable access to an improved water source, urban and rural ⁷	91.4	56.9	62.4
	Percentage of population with access to improved sanitation, urban and rural ⁸	94.8	83.7	85.4

¹ Excludes children with parental status missing
² Refers to respondents who attended secondary school or higher and women who can read a whole sentence
³ Wage employment includes respondents who receive wages in cash or in kind
⁴ Higher-risk sex refers to sexual intercourse with a partner who neither was a spouse nor who lived with the respondent; time frame is 12 months preceding the survey.
⁵ A person is considered to have a comprehensive knowledge about AIDS when they say that use of condoms for every sexual intercourse and having just one uninfected and faithful partner can reduce the chance of getting the AIDS virus, that a healthy-looking person can have the AIDS virus, and when they reject the two most common local misconceptions. The most common misconceptions in Malawi are that AIDS can be transmitted through mosquito bites and that a person can become infected with the AIDS virus by supernatural means.
⁶ Charcoal, firewood, straw, dung, or crop waste
⁷ Improved water sources are: household connection (piped), public standpipe, borehole, protected dug well, protected spring, or rain-water collection.
⁸ Improved sanitation technologies are: connection to a public sewer, connection to septic system, pour-flush latrine, simple pit latrine, or ventilated improved pit latrine.

ANALYSIS OF RESPONSE BIAS AND ADJUSTMENT OF HIV PREVALENCE *Appendix G*

BACKGROUND

The 2004 MDHS separately administered the individual interview and collected blood samples for subsequent HIV testing. Respondents had the opportunity to accept or decline to participate in the survey as well as to accept or decline to provide a blood sample. The overall rate of survey participation was 96 percent for women and 86 percent for men (Table 1.2). As discussed in Chapter 12, 70 percent of women consented to the HIV test, as did 63 percent of the men (Table 12.1).

In any survey such as the 2004 MDHS, nonparticipation, and the potential for an associated bias, is a concern. Those who did not participate in the HIV test, for example, may be different in their characteristics or behaviour from those who consented to provide a blood sample. Thus, it has become standard procedure to conduct an analysis of those who are not tested in order to look for potential biases.

Because the characteristics of women and men who were interviewed in the survey but not tested are known, statistical analysis and modeling can be used to provide an estimate of their HIV status, using the relationships found for those who were both interviewed and tested. For (those) eligible respondents who were neither interviewed nor tested, basic information from the household questionnaire can be used in a simpler model to predict their HIV status.

The worldwide Demographic and Health Surveys programme has conducted such analyses for each of the DHS surveys in which HIV data were collected. A description of the general method and the results for several countries can be found in a review paper (Mishra et al., 2006a).

A review of the 2004 MDHS results reveals an overall survey participation rate and a HIV testing rate that fall within the range of experience in other DHS survey countries. However, in Malawi, an additional concern is the low HIV testing rate (39 percent for women, 38 percent for men) and the resulting anomalous HIV prevalence results for Lilongwe District (Tables 12.2.1, 12.2.2, and 12.4).

Because of this, the standard adjustment approach was modified for Malawi. For all of Malawi with the exception of Lilongwe, the standard approach is used, combining the empirical results from those interviewed and tested with the estimated HIV results from the separate models for those interviewed and not tested and for those not interviewed and not tested (see Table G.1). For the subsample of Lilongwe District, the “complete model” was used to estimate the HIV status of respondents with completed interview, and the simple model was used to estimate the HIV status for those who were not interviewed and not tested (see Table G.2). The overall adjusted HIV figure for Malawi is obtained by combining the various component parts.

The following sections provide details of the methodology and adjusted HIV prevalence figures by selected characteristics.

ANALYSIS

In the 2004 MDHS, HIV test results were linked anonymously to all of the respondent's characteristics collected in the questionnaires after scrambling the household and cluster identification codes. To estimate the extent of nonresponse bias and its potential impact on the observed HIV rates, all eligible respondents are divided into three groups: (1) interviewed and tested; (2) not interviewed, not tested; and (3) interviewed, not tested.

To evaluate the effect of nonresponse bias on the survey estimates, HIV prevalence is predicted for the not-tested groups (Groups 2 and 3) based on multivariate models of HIV for those who were tested, using a common set of predictor variables. A logistic regression model is used to calculate predicted HIV prevalence separately for the “not-interviewed, not-tested” and “interviewed, not-tested” groups. Predictions for the “not-interviewed, not-tested” group are based on a limited set of variables (only from the household questionnaire), but predictions for the “interviewed, not-tested” group account for selected individual sociodemographic and behavioural characteristics of the respondents, as collected in the survey. As noted above, for the Lilongwe subsample, all interviewed respondents were treated as if they were in Group 3.

Variables for predicting prevalence in the “not-interviewed, not-tested” group include, age, education, wealth quintile, residence, and geographic region. Additional variables in the “complete model” for predicting prevalence in the “interviewed, not-tested” group include: marital union, current work status, media exposure, religion, STI or STI symptoms in past 12 months, cigarette smoking/tobacco use, age at first sex, number of sex partners in past 12 months, higher-risk sex in past 12 months, condom use at last sex in past 12 months, and willingness to care for a family member with AIDS. In models for the total sample (males and females combined), an additional sex variable was included.

Data processing for the 2004 MDHS was done using CSDPro, a software package developed by the MEASURE DHS programme and the U.S. Census Bureau. Multivariate analyses used STATA version 8.0. All analyses are carried out separately for males and females. Adjusted HIV prevalence is calculated as a weighted average of observed prevalence among those who were tested and predicted prevalence in the two groups of not-tested respondents. Sampling weights were applied in accordance with standard DHS procedures. HIV sampling weights were used for tested individuals (Group 1), individual sampling weights were applied to persons who were “interviewed, not tested” (Group 3), and household sampling weights were used for the “not interviewed, not tested” (Group 2), respectively. Further details on the analysis are included in Mishra et al. (2006b).

RESULTS

Table G.1 shows the observed and adjusted HIV prevalence for women, men, and total samples for Malawi excluding Lilongwe, for Lilongwe, and for Malawi total. Overall, the combined adjustment for nonresponse and not tested raises the HIV prevalence by about 0.8 percentage points above the observed level (12.7 percent compared with 11.8 percent). For women, the adjustment adds about a full percentage point onto the observed prevalence, raising the figure from 13.3 percent to 14.4 percent. For men, the effect of adjustment is smaller, adding only about 0.6 percentage points (10.2 and 10.8, respectively).

Part of the rationale for adjustment was to correct the figures for Lilongwe, where a low HIV testing rate and implausibly low HIV results for those who were tested was observed, especially

among women. The adjusted HIV results for Lilongwe have indeed raised the prevalence by a considerable degree. For women, the observed HIV prevalence of 1.6 percent is raised to 11.5 percent by the adjustment. For men, the observed rate of 5.5 percent is increased to 9.2 percent. The resulting adjusted figures for Lilongwe are more in line with the expected HIV levels based on the ANC Sentinel Surveillance results from sites across Malawi. In addition, the adjustment process makes the results for women and men in Lilongwe consistent with the patterns by sex observed in other districts and regions in Malawi.

An examination of the 95% confidence levels for observed and adjusted figures shown in Table G.1 indicates that, with the exception of the results for Lilongwe, the differences between the observed and adjusted figures are not statistically significant.

Geographic area	Observed			Adjusted		
	Prevalence (R)	95% confidence interval		Prevalence (R)	95% confidence interval	
		R-2SE	R+2SE		R-2SE	R+2SE
WOMEN						
Malawi, excluding Lilongwe	15.1	13.8	16.4	14.8	13.8	15.8
Lilongwe	1.6	0.0	4.2	11.5	10.0	13.1
Malawi total	13.3	12.1	14.6	14.4	13.5	15.3
MEN						
Malawi, excluding Lilongwe	11.1	9.8	12.4	11.2	10.2	12.1
Lilongwe	5.5	0.9	10.1	9.2	7.8	10.6
Malawi total	10.2	9.0	11.5	10.8	10.0	11.7
TOTAL						
Malawi, excluding Lilongwe	13.2	12.3	14.2	13.1	12.4	13.7
Lilongwe	3.7	1.0	6.4	10.3	9.3	11.3
Malawi total	11.8	11.0	12.7	12.7	12.0	13.3

Table G.2 compares observed and adjusted HIV prevalence for women and men according to a number of respondent and household characteristics. We note that the differences between observed and adjusted figures are relatively small, for the most part. Observed patterns tend to be maintained despite the adjustment. Perhaps the most notable change evident in this table is in the data specific to the Central region, which includes Lilongwe district. For example, HIV prevalence for women in the Central region increases from 6.6 percent to 9.7 percent following the adjustment.

Table G.2. Observed and adjusted HIV prevalence among women and men age 15-49 by selected background characteristics, Malawi 2004

Background characteristic	Women		Men		Total	
	Observed	Adjusted	Observed	Adjusted	Observed	Adjusted
Age						
15-19	3.7	3.8	0.4	0.4	2.1	2.2
20-24	13.2	14.9	3.9	4.5	9.5	10.6
25-29	15.5	16.5	9.8	12.3	12.6	14.1
30-34	18.1	21.3	20.4	18.4	19.2	20.0
35-39	17.0	18.6	18.4	22.9	17.7	20.6
40-44	17.9	18.8	16.5	18.7	17.2	18.9
45-49	13.3	14.7	9.5	12.5	11.6	13.3
Residence						
Urban	18.0	20.9	16.3	16.0	17.1	18.3
Rural	12.5	13.0	8.8	9.4	10.8	11.3
Region						
Northern	10.4	10.4	5.4	5.2	8.1	8.0
Central	6.6	9.7	6.4	7.5	6.5	8.7
Southern	19.8	19.6	15.1	15.1	17.6	17.3
Education						
No education	13.6	14.5	9.2	10.8	12.3	13.2
Primary 1-4	12.3	13.0	6.5	7.4	9.7	10.4
Primary 5-8	13.0	13.8	10.8	11.4	11.8	12.4
Secondary +	15.7	18.0	14.6	14.2	15.1	16.2
Wealth quintile						
Lowest	10.9	11.5	4.4	5.4	8.3	9.0
Second	10.3	10.0	4.6	4.1	7.6	7.1
Middle	12.7	13.1	12.1	11.9	12.4	12.4
Fourth	14.6	15.9	11.7	13.5	13.2	14.6
Highest	18.0	20.6	14.9	15.4	16.4	18.0
Total	13.3	14.4	10.2	10.8	11.8	12.7

DISCUSSION

Minimizing nonresponse is a major challenge for all population-based surveys. The main reasons for nonresponse are refusal and absence. The analysis of nonresponse in Malawi shows consistency with data from five other DHS survey countries with linked HIV data (Burkina Faso, Cameroon, Ghana, Kenya, and Tanzania) and indicates that nonresponse does not significantly bias national HIV estimates from population-based surveys (Mishra et al., 2006a). The overall effect of nonresponse on observed national HIV prevalence estimates is small.

It is important to recognize that these adjustments only partially address nonresponse bias. The estimates can be adjusted only to the extent that the sociodemographic and behavioural characteristics included in the analysis are correlated with the risk of HIV infection in each country. Another limitation is that the adjustments for the “not-interviewed, not-tested” respondents (mostly absentees) are based on limited information. Absence from the household may itself be associated with increased risk of HIV infection. From the available data, it is not possible to appropriately adjust for bias due to absence.